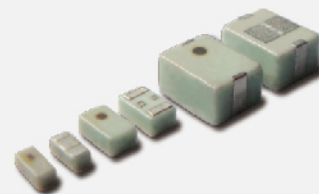




PSA PASSIVE SYSTEM ALLIANCE
WALSIN TECHNOLOGY CORPORATION

RF Devices & Customer made Antenna

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Product Portfolio



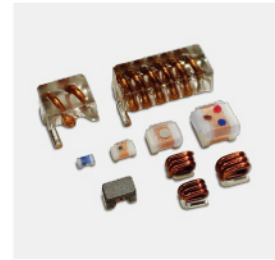
Multilayer Ceramic Capacitors



Chip Resistors



Disc Capacitors



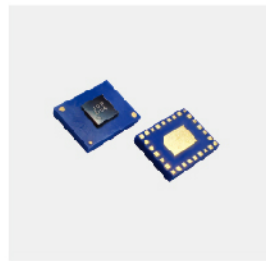
Inductors



RF Filters



Antenna



Antenna Switch & Module



MOV & MLV

IEC-63 Nominal Resistance / Capacitance

E1	100																							
E3	100			220			470																	
E6	100	150	220	330	470	680																		
E12	100	120	150	180	220	270	330	390	470	560	680	820												
E24	100	110	120	130	150	160	180	200	220	240	270	300	330	360	390	430	470	510	560	620	680	750	820	910
E96	100	102	121	124	147	150	178	182	215	221	261	267	316	324	383	392	464	475	562	576	681	698	825	845
	105	107	127	130	154	158	187	191	226	232	274	280	332	340	402	412	487	499	590	604	715	732	866	887
	110	113	133	137	162	165	196	200	237	243	287	294	348	357	422	432	511	523	619	634	750	768	909	931
	115	118	140	143	169	174	205	210	249	255	301	309	365	374	442	453	536	549	649	665	787	806	953	976

E6: $\sqrt[6]{10} \approx 1.46$ E12: $\sqrt[12]{10} \approx 1.21$

E1 series resistance: 1Ω, 10Ω, 100Ω, 1000Ω, 10000Ω, 100000Ω

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*The specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.

*This catalog has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.

■ CHIP ANTENNA

RF	ANT	321612	0	A	5	T
Type code	Product code	Dimension code	Unit of dimension	Application	Specification	Packing
RF/RG: device	ANT : Antenna FRA : Free Antenna ECA : SMD Antenna	Per 2 digits of Length, Width, Thickness 321612 = Length =32 Width = 16 Thickness = 12	0 : 0.1 mm 1 : 1.0 mm	A : 2.4GHz ISM Band E : GPS 1.5GHz L : 2.4/5.2/5.8GHz Tri Band W : WiMAX	Code from 0-9 dependent on different electrical specification	T: 7" Reeled G: 13" Reeled

■ HIGH FREQUENCY MULTILAYER BAND PASS FILTER

RF	BPF	322515	0	A	4	T
Type code	Product code	Dimension code	Unit of dimension	Application	Specification	Packing
RF device	BPF : Band Pass Filter	Per 2 digits of Length, Width, Thickness 322515 = Length =32 Width = 25 Thickness = 15	0 : 0.1 mm 1 : 1.0 mm	A : 2.4GHz ISM Band W : WiMAX K : ISM 5.2/5.8 Dual Band	Code from 0-9 dependent on different electrical specification	T: 7" Reeled G: 13" Reeled

■ HIGH FREQUENCY MULTILAYER BALANCED FILTER

RF	BPB	252009	0	A	7	T
Type code	Product code	Dimension code	Unit of dimension	Application	Specification	Packing
RF/RG: device	BPB : Balanced Type Band Pass Filter	Per 2 digits of Length, Width, Thickness 252009 = Length =25 Width = 20 Thickness = 09	0 : 0.1 mm 1 : 1.0 mm	A : 2.4GHz ISM Band W : WiMAX	Code from 0-9 dependent on different electrical specification	T: 7" Reeled G: 13" Reeled

■ HIGH FREQUENCY MULTILAYER LOW PASS FILTER

RF	LPF	201211	0	A	0	T
Type code	Product code	Dimension code	Unit of dimension	Application	Specification	Packing
RF device	LPF : Low Pass Filter	Per 2 digits of Length, Width, Thickness 201210 = Length =20 Width = 12 Thickness = 11	0 : 0.1 mm 1 : 1.0 mm	A : 2.4GHz ISM Band K : ISM 5.2/5.8 Dual Band	Code from 0-9 dependent on different electrical specification	T: 7" Reeled G: 13" Reeled

■ HIGH FREQUENCY MULTILAYER HIGH PASS FILTER

RF	HPF	252009	0	L	0	T
Type code	Product code	Dimension code	Unit of dimension	Application	Specification	Packing
RF device	HPF : High Pass Filter	Per 2 digits of Length, Width, Thickness 252009 = Length =2.5 Width = 2.0 Thickness = 0.9	0 : 0.1 mm 1 : 1.0 mm	L : 2.4/4.9/5.2/5.8GHz Multiband Application	Code from 0-9 dependent on different electrical specification	T: 7" Reeled G: 13" Reeled

■ BALUN TRANSFORMERS

RF	BLN	201208	0	A	4	T
Type code	Product code	Dimension code	Unit of dimension	Application	Specification	Packing
RF/RG: device	BLN : BALUN	Per 2 digits of Length, Width, Thickness 201208 = Length =20 Width = 12 Thickness = 08	0 : 0.1 mm 1 : 1.0 mm	A : 2.4GHz ISM Band K : ISM 5.2/5.8 Dual Band	Code from 0-9 dependent on different electrical specification	T: 7" Reeled G: 13" Reeled

■ DIPLEXER

RF	DIP	201210	0	L	0	T
Type code	Product code	Dimension code	Unit of dimension	Application	Specification	Packing
RF device	DIP : Diplexer	Per 2 digits of Length, Width, Thickness 201210 = Length =20 Width = 12 Thickness = 10	0 : 0.1 mm 1 : 1.0 mm	L : 2.4/4.9/5.2/5.8GHz Multiband Application	Code from 0-9 dependent on different electrical specification	T : 7" Reeled G:13" Reeled

■ TRIPLEXER

RF	TIP	2109	A	T	M0T63
Type code	Product code	Dimension code	Pin Define	Application	Specification
RF device	TIP : Triplexer	Per 2 digits of Length, Width, Thickness e.g. : 21 = Length 2.0 mm, Width 1.2 mm, 09= Thickness 0.9 mm	Design Code	T: GPS/ ISM 2.4GHz/5 GHz	Design Code

■ COMMON MODE FILTER

RF	CMF	122010	0	M	3	T
Type code	Product code	Dimension code	Unit of dimension	Application	Specification	Packing
RF/RG: device	CMF : Common Mode Filter	Per 2 digits of Length, Width. 122010 = Length =12 Width = 20 Thickness = 10	0 : 0.1 mm 1 : 1.0 mm	M: USB 2.0/ IEEE1394	Code from 0-9 dependent on different electrical specification	T : 7" Reeled

■ COUPLER

RF	CPL	18	10	B	2450	T
Type code	Product code	Dimension code	Coupling Factor	Unit	Application	Packing
RF device	Coupler	e.g. : 18 = Length 16, Width 08, 15= Length 10, Width 05,	10 dB	dB	2.4 GHZ ISM Band	T : 7" Reeled

■ SAW FILTER

SF	1411	2595	B38	03	T
Product code	Dimension code	Frequency	Application	Serial Number	Packing
SF:SAW Filter DF:SAW DUPLEXER	Per 2 digits of Length, Width 1411= Length 1.4mm Width 1.1mm	2595:Center Freq (2595MHz)	B38:Band38	Design Code	T: 7" Reeled

■ ANTENNA SWITCH

RF	ASW	D	H2418A	T
Type code	Product code	Application	Serial Number	Packing
RF device	ASW: Antenna Switch	D: SP8T	Design Code	T: 7" Reeled

■ ANTENNA SWITCH MODULE

RM	ASM	N	T1492A	T
Type code	Product code	Application	Serial Number	Packing
RM: Walsin RF Module Device	ASM: Antenna Switch Module	N: SP16T	Design Code	T: 7" Reeled

■ **Dipole Antenna**

RF	DPA	8709	00	S	B	A	B	8	01
Type code	Product code	Dimension code	Cable Length code	Connector Brand code	Type of Connector code	Application code	Project status code	Wire Diameter code	Project code
RF device	DPA : Dipole Antenna	Per 2 digits of Length, Width 8709 = Length = 87 Width = 9.95	2 digits for cable length 10= None Cable	A: N C:MCX D:IPEX III E: IPEX IV F: IPEX A13 H: Hirose I: IPEX K:F M: MMCX S: SMA T: TNC U:MURATA N: None	A: Reverse Female B: Reverse Male F: Female M: Male N: None	0: 0GHz 5: 5 GHz A: 2.4GHz ISM band B: GSM 900/1800 dual band G: GPS band L: 2.4/5.2/5.8 GHz tri-band T:LTE band U:UHF W: WCDMA band	B: MP T:During Test X: Pile Run	0:None 1:Ø0.81 2:Ø1.32 3:Ø1.13 4:Low LossØ1.13 5:Ø0.50 6:RG316 7:Ø1.37 8:RG178 9:Low LossØ1.37 A:RG174 B:1.5C-2V	01-99 series number

■ **PCB Antenna**

RF	PCA	4305	10	N	N	A	B	4	01
Type code	Product code	Dimension code	Cable Length code	Connector Brand code	Type of Connector code	Application code	Project status code	Wire Diameter code	Project code
RF device	PCA : PCB Antenna	Per 2 digits of Length, Width 4305 = Length = 43 Width = 5	2 digits for cable length 10= Cable Length: 10cm	A: N C:MCX D:IPEX III E: IPEX IV F: IPEX A13 H: Hirose I: IPEX K:F M: MMCX S: SMA T: TNC U:MURATA N: None	A: Reverse Female B: Reverse Male F: Female M: Male N: None	0: 0GHz 5: 5 GHz A: 2.4GHz ISM band B: GSM 900/1800 dual band G: GPS band L: 2.4/5.2/5.8 GHz tri-band T:LTE band U:UHF W: WCDMA band	B: MP T:During Test X: Pile Run	0:None 1:Ø0.81 2:Ø1.32 3:Ø1.13 4:Low LossØ1.13 5:Ø0.50 6:RG316 7:Ø1.37 8:RG178 9: Low LossØ1.37 A:RG174 B:1.5C-2V	01-99 series number

■ **FPA Antenna**

RF	FPA	3025	10	I	M	A	B	3	01
Type code	Product code	Dimension code	Cable Length code	Connector Brand code	Type of Connector code	Application code	Project status code	Wire Diameter code	Project code
RF device	FPA : FPA Antenna	Per 2 digits of Length, Width 3025 = Length = 30 Width = 25	2 digits for cable length 10= Cable Length: 10cm	A: N C:MCX D:IPEX III E: IPEX IV F: IPEX A13 H: Hirose I: IPEX K:F M: MMCX S: SMA T: TNC U:MURATA N: None	A: Reverse Female B: Reverse Male F: Female M: Male N: None	0: 0GHz 5: 5 GHz A: 2.4GHz ISM band B: GSM 900/1800 dual band G: GPS band L: 2.4/5.2/5.8 GHz tri-band T:LTE band U:UHF W: WCDMA band	B: MP T:During Test X: Pile Run	0:None 1:Ø0.81 2:Ø1.32 3:Ø1.13 4:Low LossØ1.13 5:Ø0.50 6:RG316 7:Ø1.37 8:RG178 9: Low LossØ1.37 A:RG174 B:1.5C-2V	01-99 series number

■ **Metal Antenna**

RF	MTA	3109	10	I	M	L	B	7	01
Type code	Product code	Dimension code	Cable Length code	Connector Brand code	Type of Connector code	Application code	Project status code	Wire Diameter code	Project code
RF device	MTA : Metal Antenna	Per 2 digits of Length, Width 3109 = Length = 31 Width = 9	2 digits for cable length 10= Cable Length: 10cm	A: N C:MCX D:IPEX III E: IPEX IV F: IPEX A13 H: Hirose I: IPEX K:F M: MMCX S: SMA T: TNC U:MURATA N: None	A: Reverse Female B: Reverse Male F: Female M: Male N: None	0: 0GHz 5: 5 GHz A: 2.4GHz ISM band B: GSM 900/1800 dual band G: GPS band L: 2.4/5.2/5.8 GHz tri-band T:LTE band U:UHF W: WCDMA band	B: MP T:During Test X: Pile Run	0:None 1:Ø0.81 2:Ø1.32 3:Ø1.13 4:Low LossØ1.13 5:Ø0.50 6:RG316 7:Ø1.37 8:RG178 9: Low LossØ1.37 A:RG174 B:1.5C-2V	01-99 series number

■ **Cable Assembly**

RF	CBA	1613	10	I	M	3	B	7	01
Type code	Product code	Dimension code	Cable Length code	Connector Brand code	Type of Connector code	Application code	Project status code	Wire Diameter code	Project code
RF device	CBA : Cable Assembly	Per 2 digits of Length, Width 1613 = Length = 16.8 Width = 13.7	2 digits for cable length 10= Cable Length: 10cm	A: N C:MCX D:IPEX III E: IPEX IV F: IPEX A13 H: Hirose I: IPEX K:F M: MMCX S: SMA T: TNC U:MURATA N: None	A: Reverse Female B: Reverse Male F: Female M: Male N: None	0: 0GHz 3: 3GHz 6: 6GHz	B: MP T:During Test X: Pile Run	0:None 1:Ø0.81 2:Ø1.32 3:Ø1.13 4:Low LossØ1.13 5:Ø0.50 6:RG316 7:Ø1.37 8:RG178 9: Low LossØ1.37 A:RG174 B:1.5C-2V	01-99 series number

■ **Connector**

RF	CON	0201	00	D	F	6	B	0	01
Type code	Product code	Dimension code	Cable Length code	Connector Brand code	Type of Connector code	Application code	Project status code	Wire Diameter code	Project code
RF device	CON : Connector	Per 2 digits of Length, Width 0201 = Length = 2.05 Width = 1.40	2 digits for cable length 00= None Cable	A: N C:MCX D:IPEX III E: IPEX IV F: IPEX A13 H: Hirose I: IPEX K:F M: MMCX S: SMA T: TNC U:MURATA N: None	A: Reverse Female B: Reverse Male F: Female M: Male N: None	0: 0GHz 3: 3GHz 6: 6GHz	B: MP T:During Test X: Pile Run	0:None 1:Ø0.81 2:Ø1.32 3:Ø1.13 4:Low LossØ1.13 5:Ø0.50 6:RG316 7:Ø1.37 8:RG178 9: Low LossØ1.37 A:RG174 B:1.5C-2V	01-99 series number

■ **NFC Antenna**

RF	NFC	0201	00	N	N	N	B	0	01
Type code	Product code	Dimension code	Cable Length code	Connector Brand code	Type of Connector code	Application code	Project status code	Wire Diameter code	Project code
RF device	NFC : Near Field Communication Antenna	Per 2 digits of Length, Width 0201 = Length = 53.7 Width = 39.7	2 digits for cable length 00= None Cable	A: N C:MCX D:IPEX III E: IPEX IV F: IPEX A13 H: Hirose I: IPEX K:F M: MMCX S: SMA T: TNC U:MURATA N: None	A: Reverse Female B: Reverse Male F: Female M: Male N: None	N: NFC	B: MP T:During Test X: Pile Run	0:None 1:Ø0.81 2:Ø1.32 3:Ø1.13 4:Low LossØ1.13 5:Ø0.50 6:RG316 7:Ø1.37 8:RG178 9: Low LossØ1.37 A:RG174 B:1.5C-2V	01-99 series number

■ **WPC Antenna**

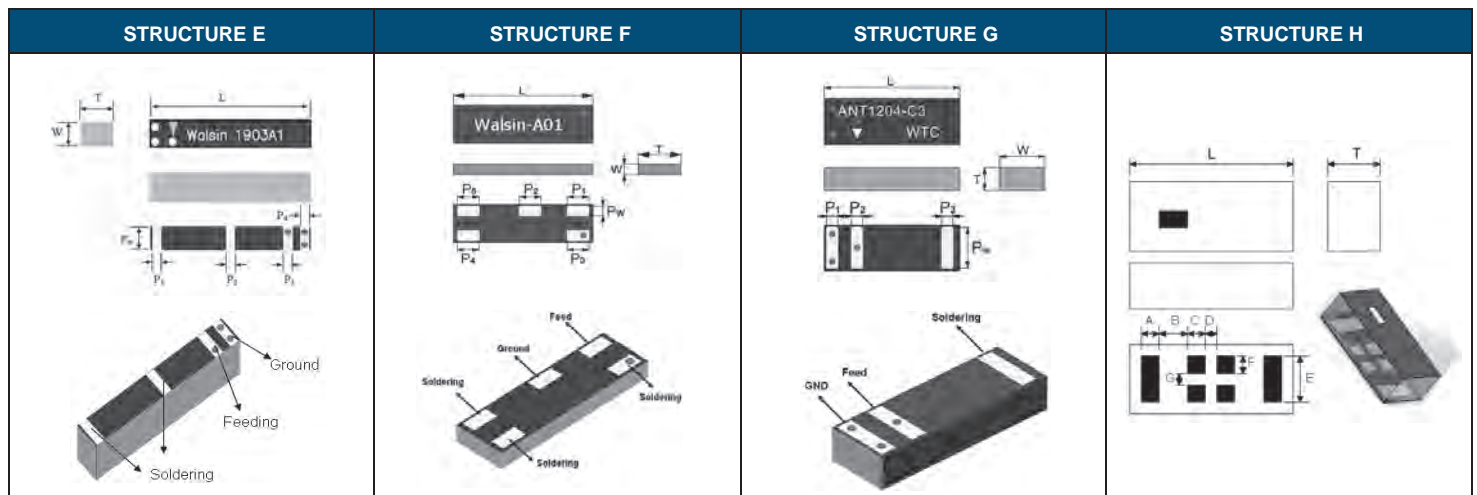
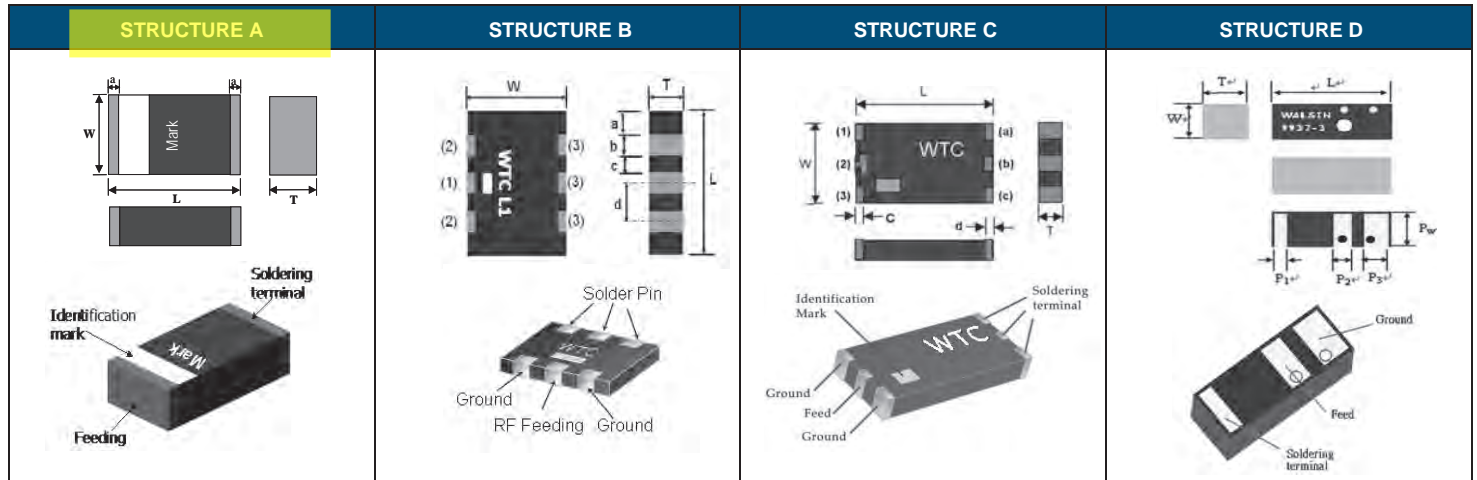
RF	WPC	5830	00	N	N	N	B	0	01
Type code	Product code	Dimension code	Cable Length code	Connector Brand code	Type of Connector code	Application code	Project status code	Wire Diameter code	Project code
RF device	WPC : Wireless Power Charging Antenna	Per 2 digits of Length, Width 5830 = Length = 58 Width = 30	2 digits for cable length 00= None Cable	A: N C:MCX D:IPEX III E: IPEX IV F: IPEX A13 H: Hirose I: IPEX K:F M: MMCX S: SMA T: TNC U:MURATA N: None	A: Reverse Female B: Reverse Male F: Female M: Male N: None	N: NFC	B: MP T:During Test X: Pile Run	0:None 1:Ø0.81 2:Ø1.32 3:Ø1.13 4:Low LossØ1.13 5:Ø0.50 6:RG316 7:Ø1.37 8:RG178 9: Low LossØ1.37 A:RG174 B:1.5C-2V	01-99 series number

Remark:

1. Central Frequency should be defined after customers' application approval.

CHIP ANTENNA

■ STRUCTURE AND PIN ASSOCIATED



■ STRUCTURE AND DIMENSION

Unit: mm

Structure\Dimension	L	W	T	a	b	c	d	1	2	3
A	10 ± 0.20	3.2 ± 0.20	0.8 ± 0.10	0.8 ± 0.10						
	2.0 ± 0.20	1.25 ± 0.20	0.90 ± 0.10	0.25 ± 0.15	-	-	-	-	-	-
	3.20 ± 0.20	1.60 ± 0.20	0.60 ± 0.10	0.25 ± 0.20	-	-	-	-	-	-
			1.20 ± 0.10	0.25 ± 0.15	-	-	-	-	-	-
	5.20 ± 0.20	2.00 ± 0.20	1.30 ± 0.20	0.40 ± 0.20	-	-	-	-	-	-
			1.15 ± 0.10	0.40 ± 0.25	-	-	-	-	-	-
			1.15 ± 0.15	0.40 ± 0.25	-	-	-	-	-	-
	5.8 ± 0.1 - 0.3	3.0 ± 0.1 - 0.3	1.1 ± 0.2 - 0.1	0.4 ± 0.25	-	-	-	-	-	-
	8.00 ± 0.20	1.05 ± 0.20	0.80 ± 0.10	0.30 ± 0.20	-	-	-	-	-	-
	9.10 ± 0.20	3.00 ± 0.20	2.00 ± 0.10	0.20 ± 0.20	-	-	-	-	-	-
	9.50 ± 0.20	2.10 ± 0.20	1.15 ± 0.10	0.50 ± 0.30	-	-	-	-	-	-
1.60 ± 0.20	0.80 ± 0.20	0.50 ± 0.10	0.10 ± 0.05							
2.00 ± 0.20	1.20 ± 0.20	0.50 ± 0.10	0.15 ± 0.05							
12.00 ± 0.15	4.00 ± 0.15	1.60 ± 0.15	4.00 ± 0.15	0.80 ± 0.10	10.40 ± 0.15					
B	5.9 ± 0.3	5.1 ± 0.3	1.1 ± 0.1	0.45 ± 0.2	1.0 ± 0.2	1.0 ± 0.2	2.0 ± 0.2	1.0 ± 0.2	1.0 ± 0.2	1.0 ± 0.2
C	7.6 ± 0.3	3.5 ± 0.2	1.1 ± 0.1	0.8 ± 0.2	0.8 ± 0.2	0.8 ± 0.2	0.5 ± 0.2	0.5 ± 0.2	0.8 ± 0.2	0.50 ± 0.2

Structure\Dimension	L	W	T	PW	P1	P2	P3	P4	P5
D	9.90±0.15	3.70±0.15	3.80±0.20	3.48±0.10	1.4±0.10	1.9±0.10	2.4±0.15	-	-
E	19.0±0.15	3.00±0.15	3.80±0.20	3.00±0.10	1.0±0.10	1.0±0.10	1.0±0.10	1.0±0.10	-
F	12.8±0.15	3.90±0.15	1.10±0.10	1.00±0.10	2.0±0.10	2.0±0.10	2.0±0.10	2.0±0.10	2.0±0.10
G	12.0±0.15	4.00±0.15	2.00±0.10	3.60±0.10	1.0±0.10	1.0±0.10	1.0±0.10	-	-
H	9.90±0.15	3.70±0.15	3.80±0.20	3.48±0.10	1.4±0.10	1.9±0.10	2.4±0.15	-	-

■ **ELECTRICAL SPECIFICATION**

1.575GHz BAND WORKING FREQUENCY

Part Number	Frequency Range (GHz)	Azimuth Beamwidth (MHz)	Gain (dBi)	VSWR (max.)	Impedance (Ω)	Polarization	Size (mm)	Structure
RFANT5830110EOT	1.575	Omni-directional	0 ~ 2	2.0	50	Linear	5.80x3.00x1.10	A
RFECA1003011EOT	1.575	Omni-directional	2 ~ 3	2.0	50	Linear	10.0x3.20x0.80	A
RFECA3216060E=T	1.575	Omni-directional	3	2.0	50	Linear	3.20x1.60x0.60	A

Bluetooth/WiFi BAND WORKING FREQUENCY

Part Number	Frequency Range (GHz)	Azimuth Beamwidth (MHz)	Gain (dBi)	VSWR (max.)	Impedance (Ω)	Polarization	Size (mm)	Structure
RFECA3216060L1T	2.4-2.5 5.25-5.85	Omni-directional	0.6/2	2.1	50	Linear	3.20x1.60x0.60	A
RFANT6050110L0T	2.4-2.5 4.9-5.9	Omni-directional	4	2.0	50	Linear	5.90x5.10x1.10	B
RFANT6050110L1T	2.4-2.5 4.9-5.9	Omni-directional	4	2.0	50	Linear	5.90x5.10x1.10	B
RFANT2012090AOT	2.4-2.5	Omni-directional	1.72	2.0	50	Linear	2.00x1.25x0.90	A
RFANT3216120A1T	2.4-2.5	Omni-directional	2	2.0	50	Linear	3.20x1.60x1.20	A
RFANT3216120A3T	2.4-2.5	Omni-directional	2	2.0	50	Linear	3.20x1.60x1.20	A
RFANT3216120A5T	2.4-2.5	Omni-directional	2	2.0	50	Linear	3.20x1.60x1.20	A
RFANT5220110A0T	2.4-2.5	Omni-directional	2	2.0	50	Linear	5.20x2.00x1.10	A
RFANT5220110A2T	2.4-2.5	Omni-directional	2	2.0	50	Linear	5.20x2.00x1.10	A
RFANT7635110A1T	2.4-2.5	Omni-directional	0 ~ 2	2.0	50	Linear	7.60x3.50x1.10	C
RFANT8010080A3T	2.4-2.5	Omni-directional	2	2.0	50	Linear	8.00x1.00x0.80	A
RFANT9520120A0T	2.4-2.5	Omni-directional	2	2.0	50	Linear	9.50x2.00x1.20	A
RFECA3216060A1T	2.4-2.5	Omni-directional	2	2.1	50	Linear	3.20x1.60x0.60	A
RFECA3216060K1T	4.9-5.85	Omni-directional	2.8	2.0	50	Linear	3.20x1.60x0.60	A
RFANT9030200A1T	2.4-2.4835	Omni-directional	2	2.1	50	Linear	9.00x 3.00x2.00	A
RGFRA1903041A1T	2.4-2.5	Omni-directional	2	2.0	50	Linear	19.0x3.00x3.80	E
RGFRA1903041A5T	2.4-2.5	Omni-directional	2	2.0	50	Linear	19.0x3.00x3.80	E
RGFRA9937380A3T	2.4-2.55	Omni-directional	2	2.0	50	Linear	9.90x3.70x3.80	D
RGFRA1304011A1T	2.4-2.5	Omni-directional	2	2.1	50	Linear	12.8x3.90x1.10	F
RGFRA1204021A1T	2.4-2.5	Omni-directional	2	2.0	50	Linear	12.0x4.00x2.00	G
RFANT2012090AOT	2.4-2.5	Omni-directional	2	2.0	50	Linear	2.00x1.25x0.90	A
RFECA1608050A0T	2.4-2.5	Omni-directional	0.7	3.0	50	Linear	1.60x0.80x0.50	A
RFECA2012050A3T	2.4-2.5	Omni-directional	0.29	2.6	50	Linear	2.00x1.20x0.5	A

WiMAX BAND WORKING FREQUENCY

Part Number	Frequency Range (GHz)	Azimuth Beamwidth (MHz)	Gain (dBi)	VSWR (max.)	Impedance (Ω)	Polarization	Size (mm)	Structure
RFANT32162G6W0T	2.5-2.69	Omni-directional	1	3.0	50	Linear	3.20x1.60x1.20	A
RFANT32163G5W0T	3.3-3.8	Omni-directional	2-3	2.0	50	Linear	3.20x1.60x1.20	A

UHF BAND WORKING FREQUENCY

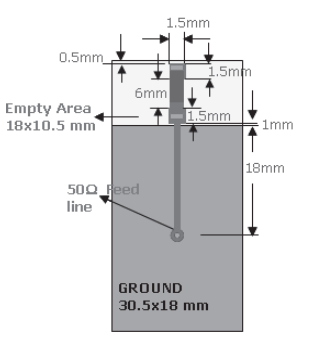
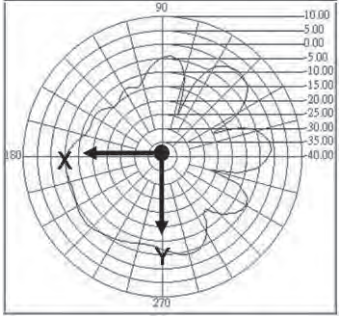
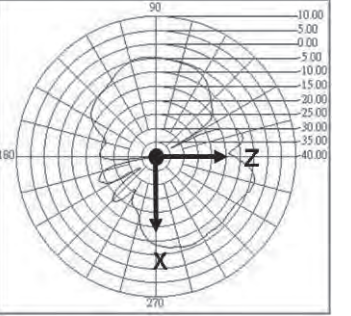
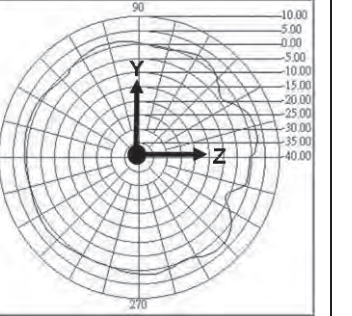
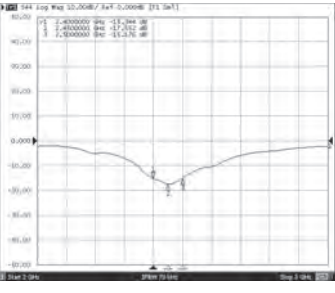
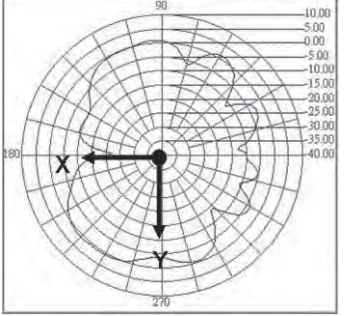
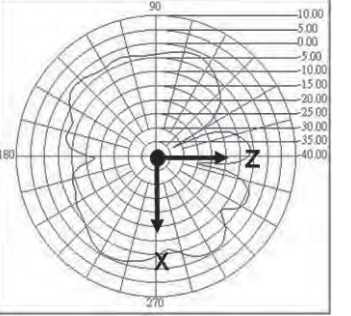
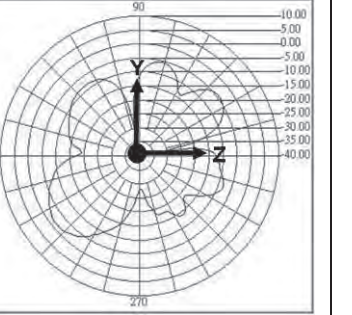
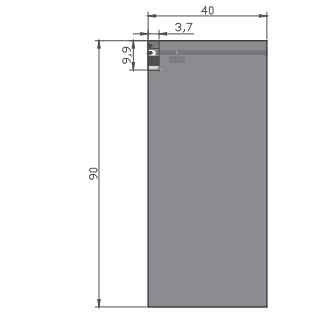
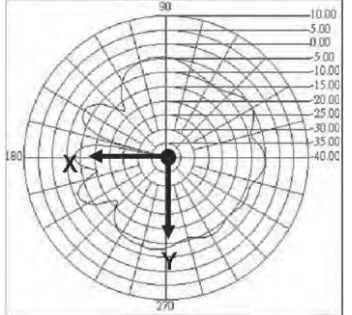
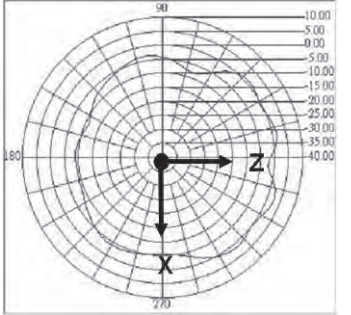
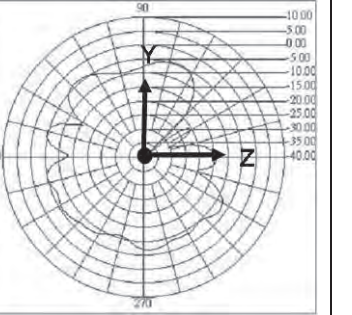
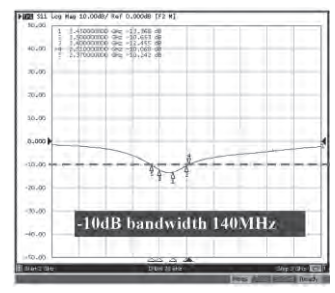
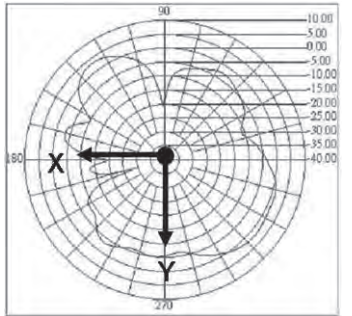
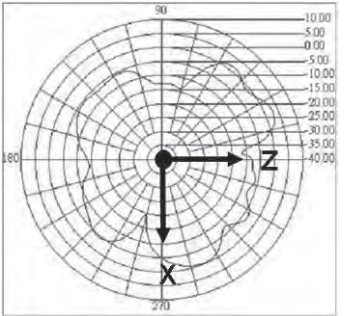
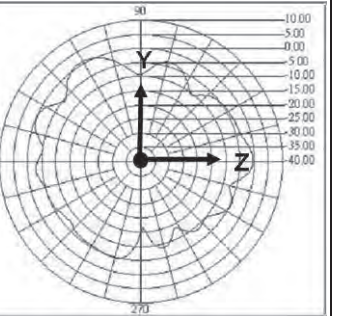
Part Number	Frequency Range (MHz)	Azimuth Beamwidth (MHz)	Gain (dBi)	VSWR (max.)	Impedance (Ω)	Polarization	Size (mm)	Structure
RGFRA1204011DCT	900-930	Omni-directional	1	2.0	50	Linear	12.00x4.00x1.60	A
RGFRA1204011DET	855-885	Omni-directional	1	2.0	50	Linear	12.00x4.00x1.60	A

■ For more information, please contact with local sales representative

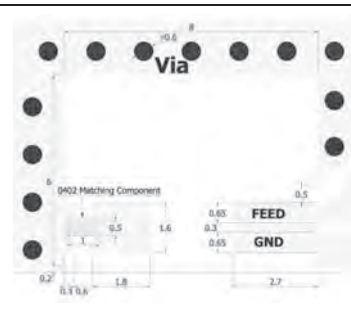
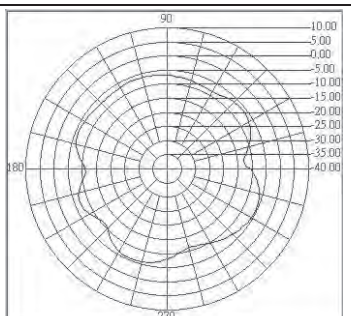
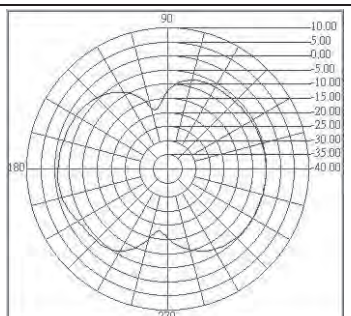
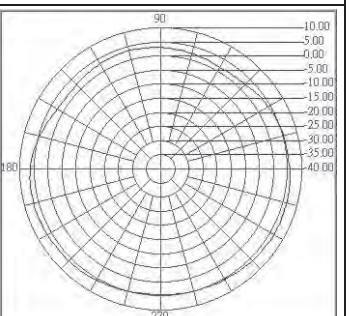
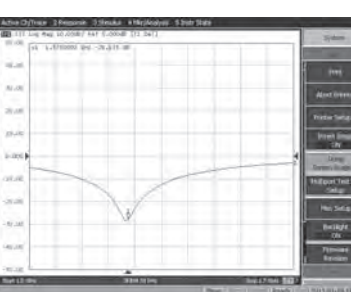
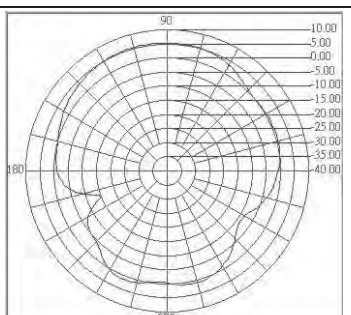
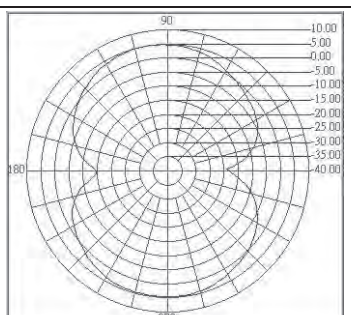
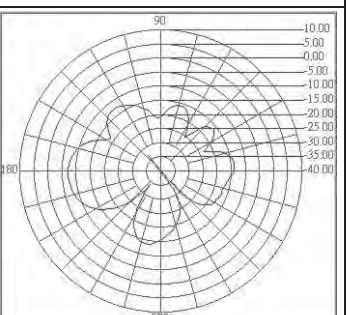
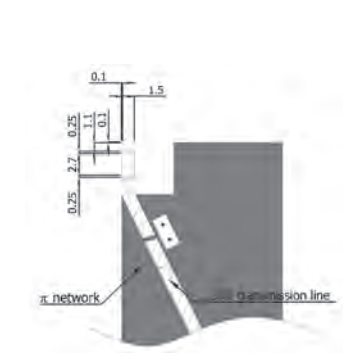
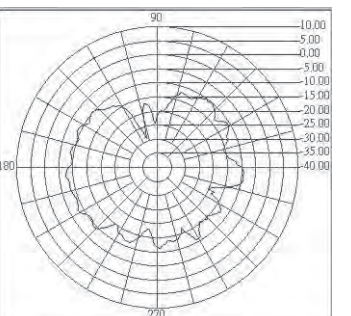
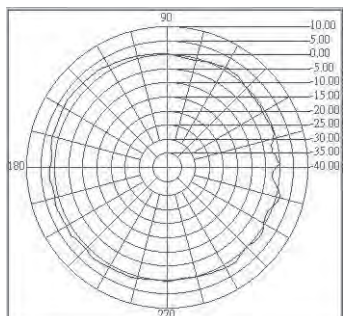
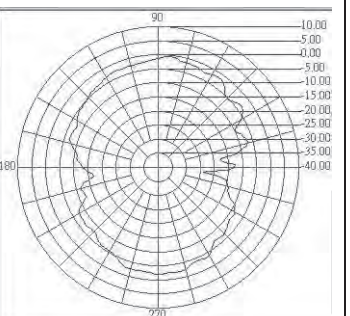
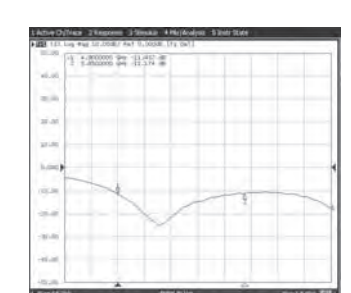
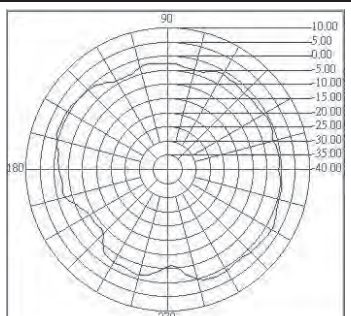
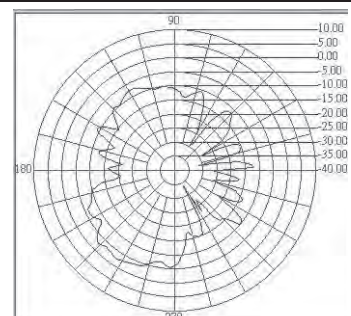
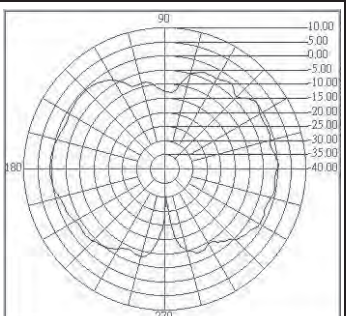
■ All specifications are subject to change without notice

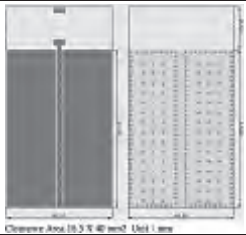


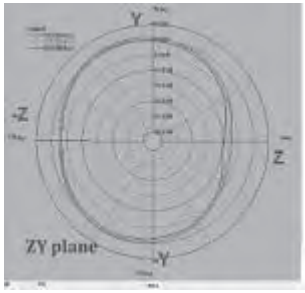
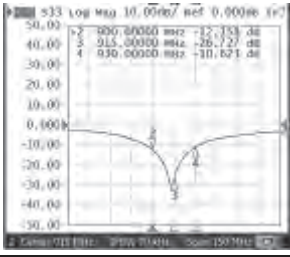
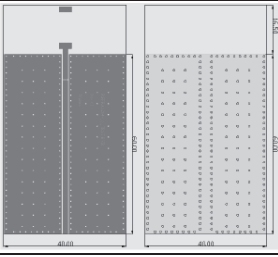
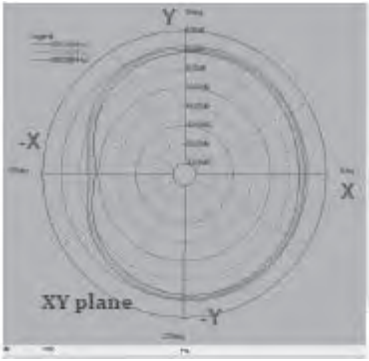
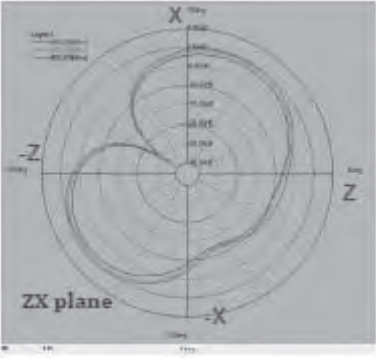

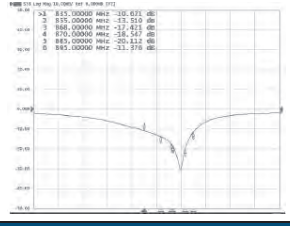
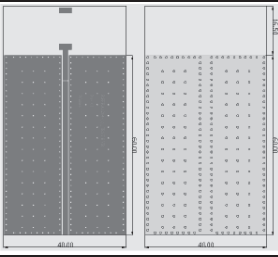
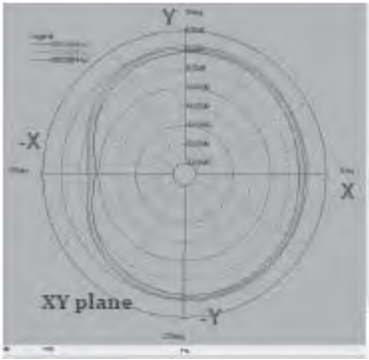
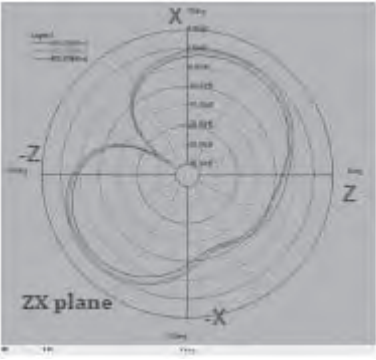
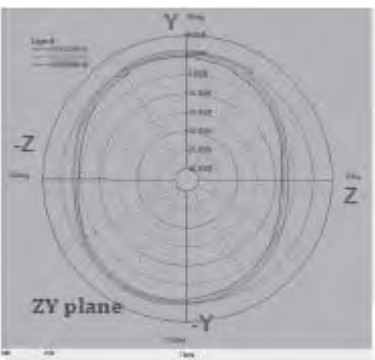
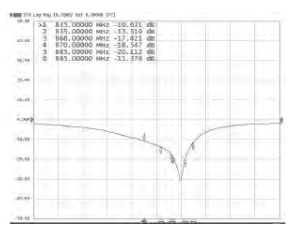
■ **TYPICAL ELECTRICAL CHARACTERISTICS**

RFANT5220110A0T			
Test Board	X-Y Plane Vertical	X-Z Plane Vertical	Y-Z Plane Vertical
	<p>Peak Gain= -5.97dBi Average Gain=-3.12 dBi</p>	<p>Peak Gain= -5.97dBi Average Gain=-3.24 dBi</p>	<p>Peak Gain= 1.69dBi Average Gain=-3.22 dBi</p>
Return Loss (S11)	X-Y Plane Horizontal	X-Z Plane Horizontal	Y-Z Plane Horizontal
	<p>Peak Gain= 2.59dBi Average Gain=-9.24 dBi</p>	<p>Peak Gain= 2.66dBi Average Gain=-8.61 dBi</p>	<p>Peak Gain= -5.42dBi Average Gain=-8.98 dBi</p>
RGFAR1903041A1T			
Test Board	X-Y Plane Vertical	X-Z Plane Vertical	Y-Z Plane Vertical
	<p>Peak Gain= -7.42 dBi Average Gain= -10.48 dBi</p>	<p>Peak Gain= 1.95 dBi Average Gain= -0.81 dBi</p>	<p>Peak Gain= -0.26dBi Average Gain=-5 dBi</p>
Return Loss (S11)	X-Y Plane Horizontal	X-Z Plane Horizontal	Y-Z Plane Horizontal
	<p>Peak Gain= 2.0 dBi Average Gain= -2.31 dBi</p>	<p>Peak Gain= -2.65 dBi Average Gain= -8.4dBi</p>	<p>Peak Gain = 1.11dBi Average Gain = -4.37 dBi</p>

RFANT8010080A3T			
Test Board 	X-Y Plane Vertical  Peak Gain= 0.76 dBi Average Gain= -5.81dBi	X-Z Plane Vertical  Peak Gain= -3.76 dBi Average Gain= -8.72dBi	Y-Z Plane Vertical  Peak Gain = 3.03 dBi Average Gain = 0.71 dBi
Return Loss (S11) 	X-Y Plane Horizontal  Peak Gain= 1.37 dBi Average Gain= -2.67 dBi	X-Z Plane Horizontal  Peak Gain= -0.25 dBi Average Gain= -4.24 dBi	Y-Z Plane Horizontal  Peak Gain= -1.37 dBi Average Gain= -8.6 dBi
RGFAR9937380A3T			
Test Board 	X-Y Plane Vertical  Peak Gain= -4.48 dBi Average Gain= -8.02 dBi	X-Z Plane Vertical  Peak Gain= 2.49 dBi Average Gain= -2.47 dBi	Y-Z Plane Vertical  Peak Gain= -4.05dBi Average Gain= -8.03 dBi
Return Loss (S11) 	X-Y Plane Horizontal  Peak Gain= 3.19 dBi Average Gain= -2.65 dBi	X-Z Plane Horizontal  Peak Gain= 3.05 dBi Average Gain= -4.10dBi	Y-Z Plane Horizontal  Peak Gain = 0.95dBi Average Gain = -4.26 dBi

RFECA3216060A1T			
Test Board	X-Y Plane Vertical	X-Z Plane Vertical	Y-Z Plane Vertical
<p>unit:mm</p>	<p>Peak Gain = 3.37 dBi Average Gain = -0.65 dBi</p>	<p>Peak Gain= 0.83 dBi Average Gain= -1.35 dBi</p>	<p>Peak Gain= -9.59 dBi Average Gain= -15.40 dBi</p>
Return Loss (S11)	X-Y Plane Horizontal	X-Z Plane Horizontal	Y-Z Plane Horizontal
	<p>Peak Gain= -4.62 dBi Average Gain=-10.42 dBi</p>	<p>Peak Gain= 0.51 dBi Average Gain= -4.07 dBi</p>	<p>Peak Gain= 1.39 dBi Average Gain= -2.07 dBi</p>
RFECA1003011E0T			
Antenna S11 on Test Board	X-Y Plane Vertical	X-Z Plane Vertical	Y-Z Plane Vertical
	<p>Peak Gain = 3.12dBi Average Gain = -3.99 dBi</p>	<p>Peak Gain= 1.97dBi Average Gain= -1.44 dBi</p>	<p>Peak Gain = 3.32dBi Average Gain = 1.02 dBi</p>
Antenna VSWR on Test Board	X-Y Plane Horizontal	X-Z Plane Horizontal	Y-Z Plane Horizontal
	<p>Peak Gain = +0.48dBi Average Gain = -4.59dBi</p>	<p>Peak Gain = +4.99dBi Average Gain = -1.31dBi</p>	<p>Peak Gain = +3.02dBi Average Gain = -0.85dBi</p>

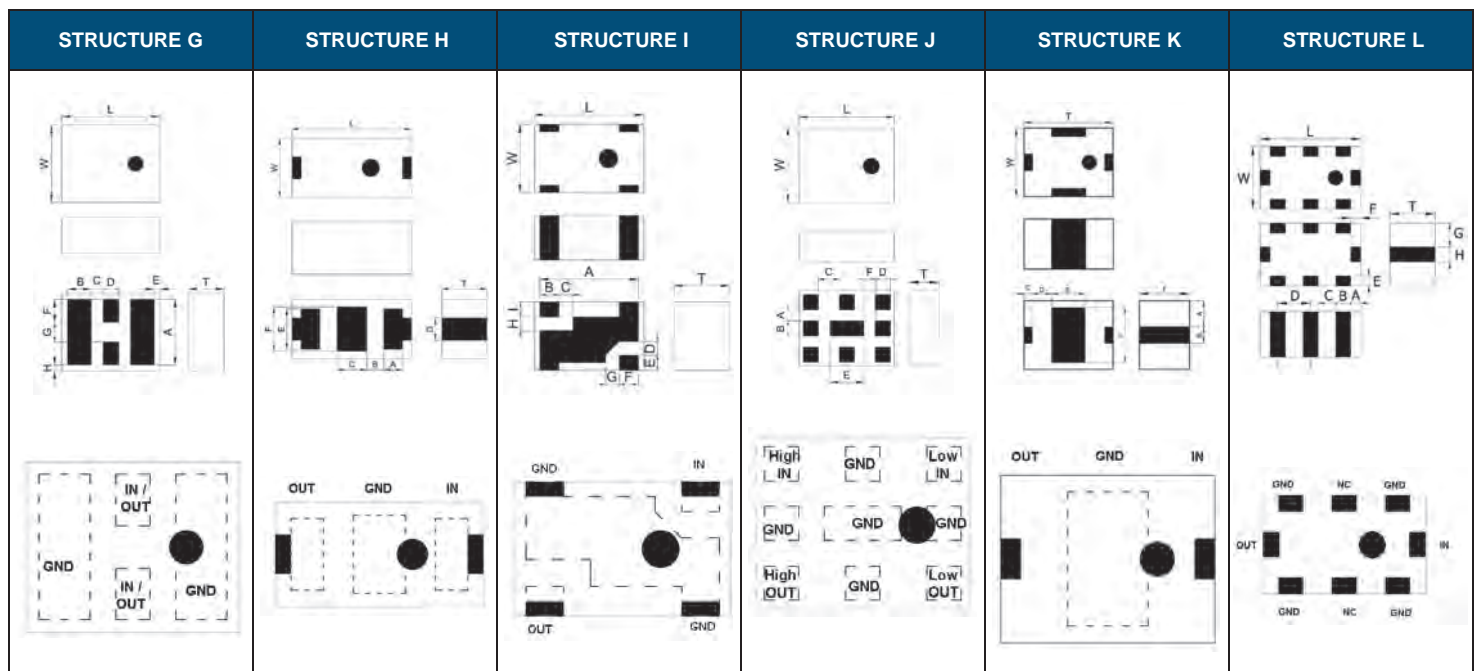
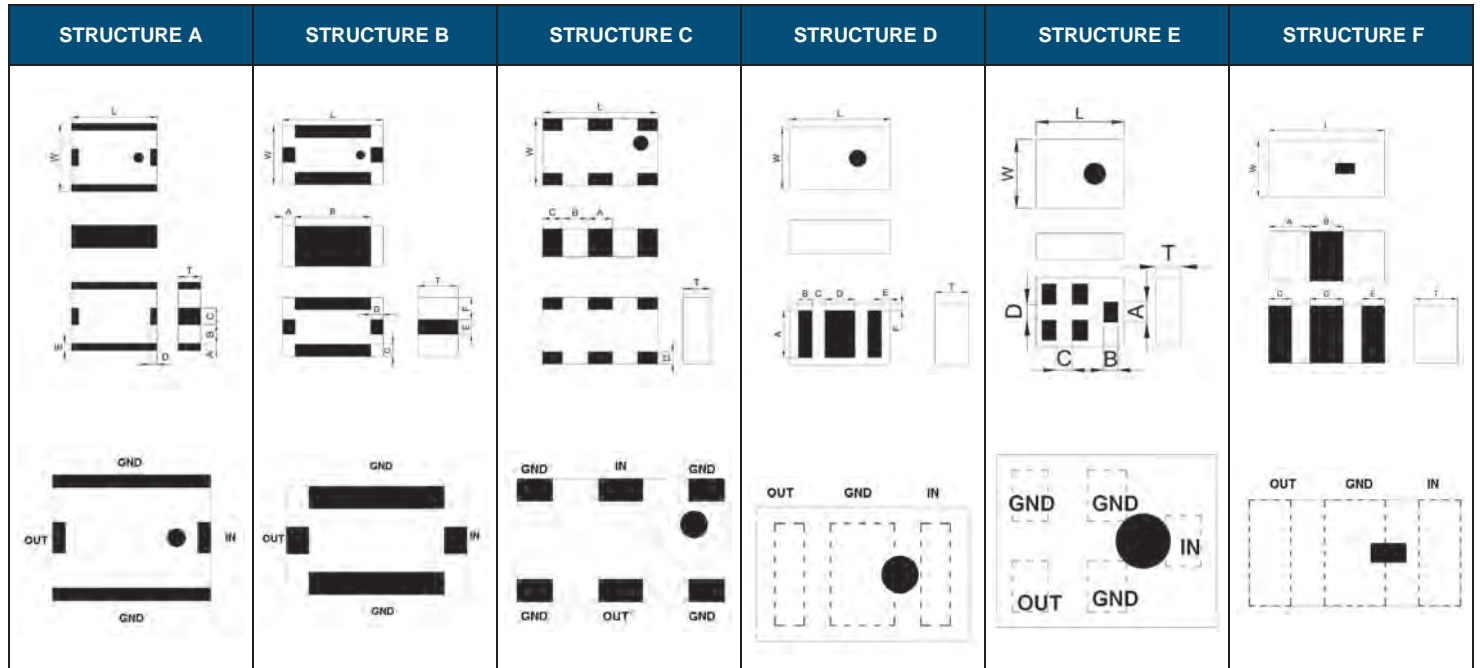
RFECA3216060E1T			
Land Pattern	X-Y Plane Vertical	X-Z Plane Vertical	Y-Z Plane Vertical
	 <p>Peak Gain= -5.51 dBi Average Gain= -7.48 dBi</p>	 <p>Peak Gain= -0.85 dBi Average Gain= -5.22 dBi</p>	 <p>Peak Gain= 6.74 dBi Average Gain = 4.81 dBi</p>
Return Loss (S11)	X-Y Plane Horizontal	X-Z Plane Horizontal	Y-Z Plane Horizontal
	 <p>Peak Gain= 5.36 dBi Average Gain= 1.25 dBi</p>	 <p>Peak Gain= 4.85 dBi Average Gain= 1.21 dBi</p>	 <p>Peak Gain= -6.99 dBi Average Gain= -14.30 dBi</p>
RFECA3216060K1T			
Land Pattern	X-Y Plane Vertical	X-Z Plane Vertical	Y-Z Plane Vertical
	 <p>Peak Gain= -7.42 dBi Average Gain= -11.78 dBi</p>	 <p>Peak Gain= 2.86 dBi Average Gain= 0.86 dBi</p>	 <p>Peak Gain= -0.55 dBi Average Gain= -4.9 dBi</p>
Return Loss (S11)	X-Y Plane Horizontal	X-Z Plane Horizontal	Y-Z Plane Horizontal
	 <p>Peak Gain= 2.3 dBi Average Gain= -1.1 dBi</p>	 <p>Peak Gain= -2.49 dBi Average Gain= -9.61 dBi</p>	 <p>Peak Gain = 0.73 dBi Average Gain = -2.86 dBi</p>

RGFRA1204011DCT			
Test Board	X-Y Plane	X-Z Plane	Y-Z Plane
 <p>Clearance Area 18.3 X 40 mm² Unit 1 mm</p>	 <p>Peak Gain= -0.82 dBi Average Gain= -1.11 dBi</p>	 <p>Peak Gain= 0.56 dBi Average Gain= -3.41 dBi</p>	 <p>Peak Gain= 0.94dBi Average Gain=-1.48 dBi</p>
<p>Return Loss (S11)</p> 	<p>RGFRA1204011DET</p>		
Test Board	X-Y Plane	X-Z Plane	Y-Z Plane
	 <p>Peak Gain= -0.85 dBi Average Gain= -0.74 dBi</p>	 <p>Peak Gain= -1.06 dBi Average Gain= -3.01 dBi</p>	 <p>Peak Gain= -0.82dBi Average Gain=-1.29 dBi</p>
<p>Return Loss (S11)</p> 	<p>RGFRA1204011DET</p>		
Test Board	X-Y Plane	X-Z Plane	Y-Z Plane
	 <p>Peak Gain= -0.85 dBi Average Gain= -0.74 dBi</p>	 <p>Peak Gain= -1.06 dBi Average Gain= -3.01 dBi</p>	 <p>Peak Gain= -0.82dBi Average Gain=-1.29 dBi</p>
<p>Return Loss (S11)</p> 			

- For more information, please contact with local sales representative
- All specifications are subject to change without notice

HIGH FREQUENCY MULTILAYER BAND PASS FILTER

■ **STRUCTURE AND PIN ASSOCIATED**



■ **STRUCTURE AND DIMENSION**

Unit: mm

Structure\ Dimension	L	W	T	A	B	C	D	E	F	G	H	I	
A	2.50±0.20	2.00±0.20	0.70±0.10	0.20±0.20	0.55±0.20	0.50±0.20	0.25±0.20	0.20±0.20	-	-	-	-	
			0.90±0.10	0.20±0.20	0.55±0.20	0.50±0.20	0.20±0.20	0.20±0.20	-	-	-	-	
			1.00±0.10	0.20±0.20	0.55±0.20	0.50±0.20	0.25±0.20	0.20±0.20	-	-	-	-	
			1.05±0.10	0.25±0.20	0.50±0.20	0.50±0.20	0.25±0.20	0.25±0.20	-	-	-	-	
			1.20±0.10	0.25±0.20	0.50±0.20	0.50±0.20	0.25±0.20	0.25±0.20	-	-	-	-	
	2.05±0.20	0.70±0.20	0.25±0.20	0.50±0.20	0.50±0.20	0.25±0.20	0.25±0.20	-	-	-	-		
3.20±0.20	2.50±0.10	1.50±0.10	0.20±0.20	0.75±0.20	0.60±0.20	0.20±0.15	0.40±0.20	-	-	-	-		
B	1.00±0.10	0.50±0.10	0.40±0.10	0.35±0.10	0.30±0.10	0.15±0.10	0.15±0.10	0.30±0.10	-	-	-	-	
	1.60±0.15	0.80±0.15	0.50±0.10	0.45±0.15	0.70±0.15	0.20±0.15	0.20±0.15	0.30±0.15	0.25±0.15	-	-	-	
			0.60±0.10	0.45±0.15	0.70±0.15	0.20±0.15	0.20±0.15	0.30±0.15	0.25±0.15	-	-	-	
			0.70±0.10	0.40±0.15	0.80±0.15	0.20±0.10	0.20±0.10	0.30±0.15	0.25±0.15	-	-	-	
			0.70±0.10	0.45±0.15	0.70±0.15	0.20±0.10	0.20±0.10	0.30±0.15	0.25±0.15	-	-	-	
	2.00±.15	1.20±0.15	0.90±0.10	0.50±0.10	0.40±0.15	0.80±0.15	0.20±0.10	0.20±0.10	0.30±0.15	0.45±0.15	-	-	-
				0.20±0.15	1.60±0.15	0.20±0.15	0.20±0.15	0.40±0.15	0.40±0.15	-	-	-	
				0.20±0.15	1.60±0.15	0.25±0.15	0.25±0.15	0.30±0.15	0.45±0.15	-	-	-	
				0.45±0.15	1.10±0.15	0.25±0.15	0.25±0.15	0.30±0.15	0.45±0.15	-	-	-	
				0.50±0.15	1.00±0.15	0.20±0.15	0.20±0.15	0.30±0.15	0.45±0.15	-	-	-	
		1.25±0.15	0.60±0.10	0.50±0.15	0.50±0.15	1.00±0.15	0.25±0.15	0.25±0.15	0.30±0.15	0.475±0.15	-	-	-
					0.80±0.10	0.50±0.15	1.00±0.15	0.25±0.15	0.25±0.15	0.30±0.15	0.475±0.15	-	-
					0.90±0.10	0.50±0.15	1.00±0.15	0.25±0.15	0.25±0.15	0.30±0.15	0.475±0.15	-	-
					0.95±0.10	0.35±0.15	1.30±0.15	0.20±0.15	0.20±0.15	0.30±0.15	0.475±0.15	-	-
0.35±0.15						1.30±0.15	0.25±0.15	0.25±0.15	0.30±0.15	0.475±0.15	-	-	
0.50±0.15	1.00±0.15	0.25±0.15	0.25±0.15	0.25±0.15	0.30±0.15	0.475±0.15	-	-	-				
			0.25±0.15	0.25±0.15	0.30±0.15	0.475±0.15	-	-	-				
			0.25±0.15	0.25±0.15	0.30±0.15	0.475±0.15	-	-	-				
C	2.00±.15	1.20±0.20	0.55±0.10	0.40±0.20	0.40±0.20	0.40±0.20	0.20±0.10	-	-	-	-		
			0.60±0.10	0.40±0.20	0.40±0.20	0.40±0.20	0.20±0.10	-	-	-	-		
			0.80±0.10	0.40±0.20	0.40±0.20	0.40±0.20	0.20±0.10	-	-	-	-		
D	1.60±0.15	0.80±0.15	0.60±0.10	0.55±0.10	0.25±0.10	0.23±0.10	0.40±0.10	0.12±0.10	0.125±0.10	-	-	-	
	2.00±.15	1.25±0.10	0.45±0.10	0.95±0.10	0.275±0.20	0.25±0.10	0.60±0.10	0.175±0.10	0.15±0.10	-	-	-	
			0.70 max	0.95±0.10	0.275±0.10	0.25±0.10	0.60±0.10	0.175±0.10	0.15±0.10	-	-	-	
E	1.10±0.10	0.90±0.10	0.60±0.10	0.25±0.10	0.18±0.10	0.205±0.10	0.25±0.10	-	-	-	-		
	1.40±0.15	1.10±0.10	0.60±0.10	0.325±0.10	0.25±0.10	0.25±0.10	0.25±0.10	-	-	-	-		
	1.40±0.15	1.10±0.15	0.70±0.10	0.325±0.10	0.25±0.10	0.25±0.10	0.25±0.10	-	-	-	-		
	2.00±0.20	1.25±0.20	1.00 max.	0.325±0.10	0.25±0.10	0.25±0.10	0.25±0.10	-	-	-	-		
F	1.60±0.15	0.80±0.15	0.40±0.10	0.55±0.15	0.50±0.15	0.35±0.15	0.50±0.15	0.20±0.15	-	-	-	-	
			0.60±0.10	0.55±0.15	0.50±0.15	0.35±0.15	0.50±0.15	0.20±0.15	-	-	-	-	
G	1.60±0.10	0.80±0.10	0.70 max.	0.55±0.10	0.25±0.10	0.23±0.10	0.40±0.10	0.12±0.10	0.195±0.10	0.21±0.10	0.125±0.10	-	
	2.00±0.15	1.25±0.10	0.80±0.10	0.95±0.10	0.40±0.10	0.30±0.10	0.30±0.10	0.15±0.10	0.30±0.10	0.35±0.10	0.15±0.10	-	
			0.90±0.10	0.95±0.10	0.40±0.10	0.30±0.10	0.30±0.10	0.15±0.10	0.30±0.10	0.35±0.10	0.15±0.10	-	
2.50±0.20	2.00±0.20	0.90±0.10	1.70±0.20	0.60±0.20	0.30±0.20	0.40±0.20	0.15±0.10	0.60±0.10	0.50±0.10	0.15±0.10	-		
H	1.60±0.15	0.80±0.10	0.60 max.	0.25±0.10	0.23±0.05	0.40±0.10	0.30±0.10	0.55±0.10	0.60±0.10	-	-	-	
I	2.00±0.15	1.25±0.10	1.00 max.	1.80±0.10	0.35±0.10	0.25±0.10	0.25±0.10	0.275±0.10	0.35±0.10	0.25±0.10	0.25±0.10	0.275±0.10	
J	2.50±0.15	2.00±0.15	0.90±0.10	0.30±0.10	0.40±0.10	0.55±0.10	0.40±0.10	0.90±0.10	0.30±0.10	-	-	-	
K	2.00±0.15	1.25±0.15	1.05±0.15	0.475±0.15	0.30±0.15	0.20±0.15	0.50±0.15	0.60±0.15	0.95±0.15	-	-	-	
	3.20±0.20	2.50±0.20	1.80±0.20	0.95±0.20	0.60±0.20	0.30±0.15	0.70±0.15	1.20±0.15	2.00±0.15	-	-	-	
L	2.00±0.15	1.25±0.10	1.05 max.	0.20±0.10	0.35±0.10	0.30±0.10	0.65±0.10	0.20±0.10	0.20±0.10	0.475±0.10	0.30±0.10	-	

■ ELECTRICAL SPECIFICATION

2.4GHz BAND WORKING FREQUENCY

Part Number	Frequency Range(GHz)	Insertion Loss (dB)	Attenuation (dB min.)	VSWR (max.)	Impedance (Ω)	Size(mm)	STRUCTURE
RBBPF1005040A1T	2.4-2.5	2.5	25(824-960MHz) 20(1710-1910MHz) 20(4800-5000MHz) 15(7200-7500MHz)	2.0	50	1.00x0.50x0.40	B
RFBPF1005040A3T	2.4-2.5	1.5max.(25°C) 1.7max.(-40~+85°C)	13(824-915MHz) 5(1545-1605MHz) 34(4800-5000MHz) 27(7200-7500MHz)	2.1	50	1.00x0.50x0.40	B
RFBPF1109060A0T	2.4-2.5	1.8	35(824-960MHz) 38(1545-1605MHz) 20(1710-1990MHz) 8(2110-2170MHz) 35(3600MHz) 35(4800-5000MHz) 35(7200-7500MHz)	2.0	50	1.10x 0.90x0.60	E
RFBPF1411060A1T	2.4-2.5	1.8max.(25°C) 2.1max.(-40~+85°C)	40(824-960MHz) 40(1545-1605MHz) 20(1710-1990MHz) 8(2110-2170MHz) 35(3600MHz) 35(4800-5000MHz) 35(7200-7500MHz)	2.0	50	1.40x1.10x0.60	E
RFBPF1411060A2T	2.4-2.5	1.5	30(500-960MHz) 25(1500-1650MHz) 19(3200-3300MHz) 40(4800-5000MHz) 30(7200-7500MHz)	2.0	50	1.40x1.10x0.60	E
RBBPF1411060A3T	2.4-2.5	1.1	20(50-960MHz) 10(1710-1990MHz) 9(3600MHz) 22(4800-7200MHz)	2.0	50	1.40x1.10x0.60	E
RBBPF1411060A8T	2.4-2.5	1.0max.(25°C) 1.2max.(-40~+85°C)	15(50-960MHz) 10(1710-1990MHz) 15(3600MHz) 25(4800-7200MHz)	2.0	50	1.40x1.10x0.60	E
RFBPF1608060AA7M1U	2.4-2.5	0.95max.(25°C) 1.25max.(-40~+85°C)	20(500-960MHz) 23(3200MHz) 30(4800-5000MHz) 32(7200-7500MHz)	2.0	50	1.60x0.80x0.60	H
RFBPF1608060ADT	2.4-2.5	1.8max.(25°C) 2.1max.(-40~+85°C)	25(800-1000MHz) 22.5(1200-1300MHz) 5.5(2000MHz) 10.5(3000MHz) 23.5(3600-3800MHz) 35(4800-5000MHz) 35(7200-7500MHz)	2.0	50	1.60x0.80x0.60	B
RFBPF1608060AET	2.4-2.5	1.7max.(25°C) 2.0max.(-40~+85°C)	25(880MHz) 20(3200MHz) 35(4800-5000MHz) 25(7200-7500MHz)	2.0	50	1.60x0.80x0.60	F
RFBPF1608070AFT	2.4-2.5	2.4max.(25°C) 2.7max.(-40~+85°C)	24.5(880-960MHz) 20(1710-1990MHz) 8.5(2170MHz) 15(4800-5000MHz) 20(7200-7500MHz)	2.0	50	1.60x0.80x0.70	B
RFBPF1608070AWT	2.4-2.5	2.0max.(25°C) 2.2max.(-40~+85°C)	30 (960MHz) 25(1910MHz) 20(1990MHz) 25(4800MHz) 15(7200MHz)	2.0	50	1.60x0.80x0.70	B
RFBPF1608050A0T	2.4-2.5	2.0max.(25°C) 2.2max.(-40~+85°C)	20(960MHz) 20(1910MHz) 15(1990MHz) 18(4800MHz) 25(7200MHz)	2.0	50	1.60x0.80x0.50	B
RFBPF1608060A1T	2.4-2.5	2.8	25(695-800MHz) 20(1910MHz) 35(3200MHz) 20(4800-5000MHz) 20(7200-7500MHz)	2.0	50	1.60x0.80x0.60	B
RFBPF1608060A7T	2.4-2.5	3.0	25(695-800MHz) 20(1910MHz) 35(3200MHz) 20(4800-5000MHz) 20(7200-7500MHz)	2.0	50	1.60x0.80x0.60	B

2.4GHz BAND WORKING FREQUENCY

Part Number	Frequency Range(GHz)	Insertion Loss (dB)	Attenuation (dB min.)	VSWR (max.)	Impedance (Ω)	Size(mm)	STRUCTURE
RFBPF1608070A3T	2.4~2.5	1.8max.(25°C) 2.1max.(-40~+85°C)	27(800~900MHz) 25(4800~5000MHz) 30(7200~7500MHz)	2.0	50	1.60x0.80x0.70	B
RFBPF2012080AM0T62	2.4~2.5	1.8max.(25°C) 2.0max.(-40~+85°C)	30(860~960MHz) 30(1545~1605MHz) 35(1710~1990MHz) 30(2170MHz) 30(4800~5000MHz)	2.0	50	2.00x1.20x0.80	D
RFBPF2008A38T	2.4~2.5	1.80max.(25°C) 2.00max.(-40~+85°C)	30(860~960MHz) 30(1545~1605MHz) 35(1710~1990MHz) 30(2170MHz) 30(4800~5000MHz)	2.0	50	2.00x1.25x0.80	G
RFBPF2012090AS1T35	2.4~2.5	0.9max.(25°C) 1.1max.(-40~+85°C)	28(824~960MHz) 30(1570~1580MHz) 15(1710~1910MHz) 9.5(1910~1990MHz) 25(4800~5000MHz) 25(7200~7500MHz)	2.0	50	2.00x1.25x0.90	G
RFBPF2012060AAT	2.4~2.5	1.5max.(25°C) 1.8max.(-40~+85°C)	30(880~960MHz) 25(1710~1910MHz) 25(4800~5000MHz) 30(7200~7500MHz)	2.0	50	2.00x1.20x0.60	C
RFBPF2012040ABT	2.4~2.5	2.5	30(824~849MHz) 30(880~915MHz) 30(1545~1605MHz) 30(1565~1585MHz) 35(1710~1785MHz) 40(1850~1910MHz) 32(1920~1980MHz) 7(3168~4752MHz) 11(3300~3800MHz) 35(4800~4967MHz) 26(5150~6000MHz) 23(7200~7450MHz)	2.0	50	2.00x1.20x0.40	D
RFBPF2012050ACT	2.4~2.5	2.5	35(824~960MHz) 38(1710~1910MHz) 25(4880~5000MHz) 20(7200~7500MHz)	2.0	50	2.00x1.20x0.55	C
RFBPF2012080ADT	2.4~2.5	1.5max.(25°C) 1.7max.(-40~+85°C)	30(860~960MHz) 30(1545~1605MHz) 30(1710~1990MHz) 30(2170MHz) 30(4800~5000MHz)	2.0	50	2.00x1.25x0.80	D
RFBPF2008A40T	2.4~2.5	1.8max.(25°C) 2.0max.(-40~+85°C)	30(824~915MHz) 30(1545~1605MHz) 35(1710~1990MHz) 30(2170MHz) 30(4800~4967MHz) 25(5150~6000MHz) 20(7200~7450.5MHz)	2.0	50	2.00x1.25x0.80	D
RFBPF2008A39T	2.4~2.5	1.8max.(25°C) 2.0max.(-40~+85°C)	35(824~960MHz) 28(1540~1605MHz) 30(1710~1990MHz) 30(2170MHz) 6(3200MHz) 30(4800~4967MHz) 20(5150~6000MHz) 18(7200~7450MHz)	2.0	50	2.00x1.25x0.80	D
RFBPF2012040AHT	2.4~2.5	2.5	25(746~764MHz) 30(824~849MHz) 26(869~960MHz) 28(1570~1580MHz) 28(1710~1785MHz) 30(1850~1910MHz) 30(1930~1990MHz) 30(2110~2170MHz) 15(3300~3800MHz) 35(4800~5000MHz) 20(7200~7450.5MHz)	2.0	50	2.00x1.25x0.45	D
RBBPF2012050AHT	2.4~2.5	2.5max.(typ.2.2)	25(746~764MHz) 30(824~849MHz) 26(869~960MHz) 28(1570~1580MHz) 28(1710~1785MHz) 30(1850~1910MHz) 30(1930~1990MHz) 25(2110~2170MHz) 15(3300~3800MHz) 35(4800~5000MHz)	2.0	50	2.00x1.25x0.45	D

2.4GHz BAND WORKING FREQUENCY

Part Number	Frequency Range(GHz)	Insertion Loss (dB)	Attenuation (dB min.)	VSWR (max.)	Impedance (Ω)	Size(mm)	STRUCTURE
RFBPF2012090ALT	2.4-2.5	1.0max.(25°C) 1.2max.(-40~+85°C)	28(824-960MHz) 28(1570-1580MHz) 23(1710-1910MHz) 17(1920-1990MHz) 25(4800-5000MHz)	2.0	50	2.00x1.25x0.90	G
RFBPF2012090AMT	2.4-2.5	2.6	40(880-960MHz) 38(1710-1990MHz) 16(2170MHz) 30(4800-5000MHz) 30(7200-7500MHz)	2.0	50	2.00x1.20x0.90	B
RFBPF2012100ANT	2.4-2.5	2.3max.(25°C) 2.6max.(-40~+85°C)	40(699-960MHz) 40(1428-1448MHz) 40(1476-1607MHz) 40(1710-1785MHz) 33(1805-1880MHz) 30(1880-1915MHz) 30(1920-1990MHz) 22(2110-2170MHz) 25(4800-5000MHz) 35(7200-7500MHz)	2.0	50	2.00x1.20x1.00	I
RFBPF2012090AQT	2.4-2.5	1.2	20(1600MHz) 25(3200MHz) 20(4800-5000MHz)	2.0	50	2.00x1.20x0.90	B
RFBPF2012090ART	2.4-2.5	1.0	20(1600MHz) 25(3200MHz)	2.0	50	2.00x1.20x0.90	B
RFBPF2012100AVT	2.4-2.5	1.5max.(25°C) 1.7max.(-40~+85°C)	40(699-960MHz) 40(1428-1448MHz) 40(1476-1607MHz) 40(1710-1785MHz) 33(1805-1880MHz) 30(1880-1915MHz) 30(1920-1990MHz) 25(4800-5000MHz) 30(7200-7500MHz)	2.0	50	2.00x1.20x1.00	I
RBBPF2010A108Q1C	2.4-2.5	1.3max.(25°C) 1.5max.(-40~+85°C)	38(50-960MHz) 17(1710-1910MHz) 5(3200MHz) 30(4800-5000MHz) 25(7200-7500MHz)	2.0	50	2.00x1.20x0.90	E
RFBPF2009A12T	2.4-2.5	1.0max.(25°C) 1.2max.(-40~+85°C)	28(824-960MHz) 28(1570-1580MHz) 23(1710-1910MHz) 17(1920-1990MHz) 4(2100-2170MHz) 25(4800-5000MHz) 25(7200-7500MHz)	2.0	50	2.00x1.25x0.90	G
RBBPF2010A16T	2.4-2.5	1.3max.(25°C) 1.5max.(-40~+85°C)	38(50-960MHz) 17(1710-1990MHz) 20(3200MHz) 30(4800-5000MHz) 25(7200-7500MHz)	2.0	50	2.00x1.25x1.00	E
RFBPF2009A25T	2.4-2.5	1.7max.(25°C) 1.9max.(-40~+85°C)	30(900MHz) 20(1850MHz) 30(4800MHz)	2.0	50	2.00x1.20x0.90	B
RFBPF2009A26T	2.4-2.5	1.4max.(25°C) 1.6max.(-40~+85°C)	30(824-960MHz) 30(1710-1910MHz) 20(1920-1990MHz) 6(2110-2170MHz) 20(4800-5000MHz)	2.0	50	2.00x1.20x0.90	B
RFBPF2012040A3T	2.4-2.5	2.0max.(25°C) 2.2max.(-40~+85°C)	25(746-764MHz) 30(824-849MHz) 26(869-960MHz) 28(1570-1580MHz) 28(1710-1785MHz) 30(1850-1910MHz) 30(1930-1990MHz) 25(2110-2170MHz) 15(3300-3800MHz) 35(4800-5000MHz) 20(7200-7450.5MHz)	2.0	50	2.00x1.25x0.45	D

2.4GHz BAND WORKING FREQUENCY

Part Number	Frequency Range(GHz)	Insertion Loss (dB)	Attenuation (dB min.)	VSWR (max.)	Impedance (Ω)	Size(mm)	STRUCTURE
RFBPF2012080A6T	2.4-2.5	3.5	30(880-960MHz) 30(1710-1990MHz) 20(2110-2170MHz) 30(4800-5000MHz) 30(7200-7500MHz)	2.0	50	2.00x1.20x0.80	C
RFBPF2012100A6T	2.4-2.5	1.0max.(25°C) 1.2max.(-40~+85°C)	21(902-928MHz) 26(4800-5000MHz) 34(7200-7500MHz) 29(9600-10000MHz)	2.0	50	2.00x1.20x1.00	L
RFBPF2012080A7T	2.4-2.5	2.8 (typ.2.5)	40(DC-1600MHz) 35(1710MHz) 25(1900MHz) 12(2100MHz) 8(2170MHz) 30(3100MHz) 40(4800-5000MHz) 20(7200-7500MHz)	2.0	50	2.00x1.20x0.80	B
RFBPF2012060A9T	2.4-2.5	2.8	30(960MHz) 30(1600MHz) 20(1990MHz) 35(3200MHz) 40(4800MHz) 25(7200MHz)	2.0	50	2.00x1.20x0.60	B
RFBPF2520090ACT	2.4-2.5	2.1max.(25°C) 2.3max.(-40~+85°C)	43(806-960MHz) 43(1570-1580MHz) 43(1710-1990MHz) 20(2110-2170MHz) 30(4800-5000MHz) 25(7200-7500MHz)	2.0	50	2.50x2.00x0.90	G
RFBPF2520070AMT	2.4-2.5	2.0max.(25°C) 2.2max.(-40~+85°C)	45(824-960MHz) 45(1570-1580MHz) 45(1710-1785MHz) 40(1805-1850MHz) 35(1850-1910MHz) 35(1920-1990MHz) 25(2110-2170MHz) 5(2750-3000MHz) 15(3000-4800MHz) 30(4800-5000MHz) 30(5150-5850MHz) 20(7200-7500MHz)	2.0	50	2.50x2.00x0.70	A
RFBPF2520080AUT	2.4-2.5	2.2	30(900MHz) 30(1850MHz) 33(2170MHz) 35(4800MHz) 25(7200MHz)	2.0	50	2.50x2.00x0.70	A
RFBPF2520120A1T	2.4-2.5	1.7	30(900MHz) 30(1850MHz) 20(2100MHz) 40(4800MHz) 25(7200MHz)	2.0	50	2.50x2.00x1.20	A
RFBPF2520120A2T	2.4-2.5	2.1	30(900MHz) 30(1850MHz) 30(4800MHz)	2.0	50	2.50x2.00x1.20	A
RFBPF2520120A3T	2.4-2.5	≤1.2(25°C)	30(900MHz) 30(1850MHz) 25(4800MHz)	2.0	50	2.50x2.00x1.20	A
RFBPF2520120A4T	2.4-2.5	≤1.7(25°C)	30(900MHz) 30(1850MHz) 25(4800MHz)	2.0	50	2.50x2.00x1.20	A
RFBPF2520100A6T	2.4-2.5	1.4	35(1900/4800 MHz)	2.0	50	2.50x2.00x1.00	A

5GHZ BAND WORKING FREQUENCY

Part Number	Frequency Range(GHz)	Insertion Loss (dB)	Attenuation (dB min.)	VSWR (max.)	Impedance (Ω)	Size(mm)	STRUCTURE
RFBPF1608060K2T	4.9-5.84	1.5max.(25°C) 1.7max.(-40~+85°C)	33(100-2170MHz) 29(2170-2500MHz) 32(9800-12000MHz)	2.0	50	1.60x0.80x0.70	B
RFBPF1608060K68Q1C	4.9-5.9	1.3max.(25°C) 1.5max.(-40~+85°C)	38(30-2700MHz) 16(3453-3547MHz) 33(3667-3883MHz) 9(6900-7093MHz) 32(7333-7750MHz) 40(10600-11650MHz) 18(15540-17760MHz)	2.0	50	1.60x0.80x0.60	D
RFBPF1608060K78Q1C	5.15-5.95	0.8max.(25°C) 1.0max.(-40~+85°C)	40(30-2700MHz) 45(3400-3800MHz) 20(7250-7800MHz) 20(10300-11700MHz)	1.5	50	1.60x0.80x0.60	D
RFBPF1608060K88Q1C	5.15-5.95	0.7max.(25°C) 0.85max.(-40~+85°C)	35(30-2700MHz) 30(3400-3800MHz) 12(7250-7800MHz) 20(10300-11700MHz)	1.5	50	1.60x0.80x0.60	D
RFBPF1608060KG8D1T	5.15-5.95	0.8	40(30-2700MHz) 45(3400-3800MHz) 20(6900MHz) 20(7250-7800MHz) 20(10300-11700MHz)	1.67	50	1.60x0.80x0.60	D
RFBPF1606K12T	5.15-5.925	1.1max.(25°C) 1.3max.(-40~+85°C)	38(10-2700MHz) 20(2700-3550MHz) 15(3550-4000MHz) 3(4000-4500MHz) 5(4400MHz) 3(6500-7000MHz) 11(7000-7400MHz) 13(7400-9750MHz) 30(9750-10300MHz) 27(10300-12750MHz) 10(15540-17775MHz)	2.0	50	1.60x0.80x0.60	D
RFBPF2012100KST	4.9-5.9	1.5(4.90GHz) 1.5(5.25GHz) 1.5(5.85GHz)	30(3450MHz) 20(11000MHz)	2.0	50	2.00x1.20x1.00	B
RFBPF2012100K0T	4.9-5.9	1.7(4.90GHz) 1.5(5.25GHz) 1.5(5.85GHz)	30(3450MHz) 20(11000MHz)	2.0	50	2.00x1.20x1.00	B
RFBPF2012090K5T	4.9-5.85	2.2max.(25°C) 2.5max.(-40~+85°C)	35(340-1195MHz) 19(2140-3580MHz) 25(6855-7150MHz) 20(8570-8930MHz)	2.0	50	2.00x1.20x0.90	B
RFBPF2012100K3T	4.9-5.85	1.8max.(25°C) 2.1max.(-40~+85°C)	30(500MHz) 35(3450MHz) 30(4000MHz) 20(4200MHz) 15(9800MHz) 15(11700MHz)	2.0	50	2.00x1.20x0.95	B
RFBPF2012100K6T	5.15-5.85	1.6max.(25°C) 1.8max.(-40~+85°C)	30(500MHz) 40(2000MHz) 35(3450MHz) 30(4000MHz) 20(4200MHz)	2.0	50	2.00x1.20x0.95	B
RFBPF2012090K9T	5.725-5.85	2.0	30(500MHz) 30(4000MHz) 20(4200MHz) 32(5000MHz) 15(9800MHz) 15(11750MHz)	2.0	50	2.00x1.20x0.95	B
RFBPF2520090K1T	4.9-5.85	1.2max.(25°C) 1.5max.(-40~+85°C)	50(824-1910MHz) 15(9880-11700MHz)	2.0	50	2.50x2.00x0.90	A
KFBPF25204G7W09S5K	4.4-4.94	3.5	50(1000MHz) 35(2500MHz) 20(3500MHz) 7(4250MHz) 15(5150MHz) 20(57500MHz)	2.0	50	2.50x2.00x0.80	A

WiMAX BAND WORKING FREQUENCY

Part Number	Frequency Range(GHz)	Insertion Loss (dB)	Attenuation (dB min.)	VSWR (max.)	Impedance (Ω)	Size(mm)	STRUCTURE
RFBPF16082G3W0T	2.3-2.39	2.0	29(880-915MHz) 29(1710-1785MHz) 21(1850-1910MHz) 15(1920-1980MHz) 18(4600-4780MHz) 23(6900-7170MHz)	2.0	50	1.60x0.80x0.70	B

1558 ~ 1606 MHz GNSS Band Applications

Part Number	Frequency Range (MHz)	Insertion Loss (dB)	Attenuation (dB min.)	VSWR (max.)	Impedance (Ω)	Size(mm)	STRUCTURE
RFBPF1109060E0T	1550-1610	1.9max.	25(960MHz) 8(1850MHz) 15(1990MHz) 20(2170MHz) 35(2400-2500MHz) 35(3400-3800MHz)	2.0	50	1.10x0.90x0.60	E
RFBPF1411070E0T	1558-1606	1.8max.(25°C) 2.0max.(-40~+85°C)	30(824-849MHz) 30(880-915MHz) 10(1880-1910MHz) 22(1920-1980MHz) 30(2400MHz)	2.0	50	1.40x1.10x0.70	E

860~960MHz/1805~2025 MHz Band Application

Part Number	Frequency Range (MHz)	Insertion Loss (dB)	Attenuation (dB min.)	VSWR (max.)	Impedance (Ω)	Size(mm)	STRUCTURE
RFBPF2520090B08Q1C	869-960	0.7max.(25°C) 0.75max.(-40~+85°C)	25(430-490MHz) 10(1700-1900MHz) 20(2400-2500MHz) 20(4905-5845MHz)	1.9	50	2.50x2.00x0.90	J
	1805-2025	1.1max.(25°C) 1.2max.(-40~+85°C)	25(900-1015MHz) 15(2400-2500MHz) 15(3610-3980MHz) 20(4905-5845MHz)	2.0			

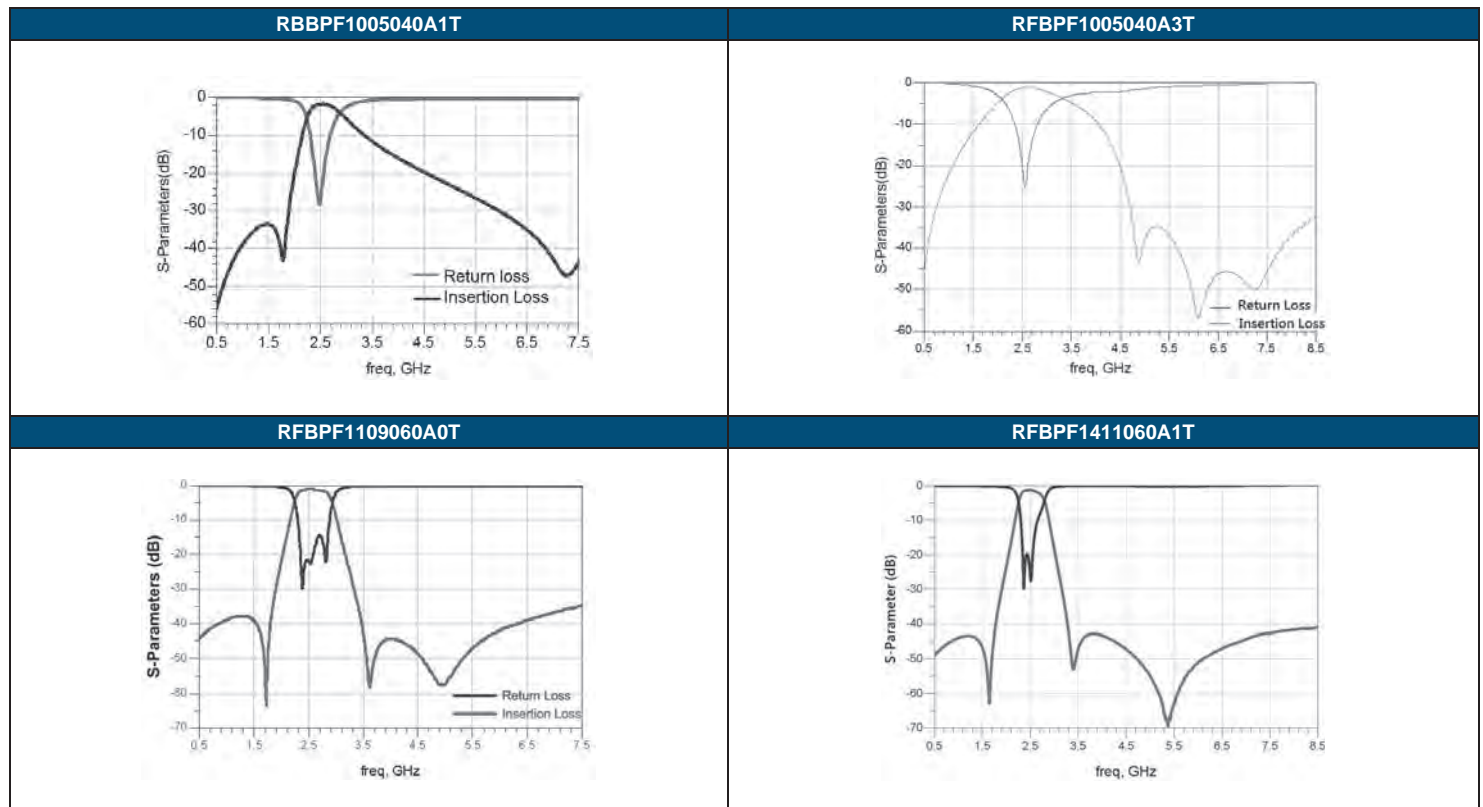
MoCA / Docsis Application

Part Number	Frequency Range(MHz)	Insertion Loss (dB)	Attenuation (dB min.)	VSWR (max.)	Impedance (Ω)	Size(mm)	STRUCTURE
RFBPF3225180Y1T	975-1025	3.0	30(54-870MHz) 30(1125-1675MHz) 30(2300MHz)	2.0	75	3.20x2.50x1.80	K
RFBPF3225200Y07B1U	475-675	2.5max.(25°C) 2.7max.(-40~+85°C)	60(2.5MHz) 40(2.5-100MHz) 35(100-200MHz) 35(200-300MHz) 8(300-400MHz) 57(950MHz) 47(950-2025MHz) 41(2025-2500MHz) 35(2500-3000MHz)	2.0	75	3.20x2.50x1.80	K
RBBPF3225180Y27B1U	400-700	2.0	42(1-200MHz) 30(950-2150MHz) 35(2150-3000MHz) 27(3000-5900MHz)	2.0	50	3.20x2.50x1.80	K
KFBPF2012100C67B1U	1125-1675	2.5	35(1-900MHz) 20(900-1002MHz) 35(2000-2500MHz) 20(2500-5900MHz)	2.0	50	2.00x1.25x1.05	K
RFBPF3225180C07B1U	1125-1675	1.8max.(25°C) 2.0max.(-40~+85°C)	30(5-864MHz) 34(864-1002MHz) 32(2300-3000MHz)	2.0	75	3.20x2.50x1.80	K
RBBPF3225180C67B1U	1125-1675	2.0	40(1-900MHz) 25(900-1002MHz) 35(2000-2500MHz) 27(2500-5900MHz)	2.0	50	3.20x2.50x1.80	K

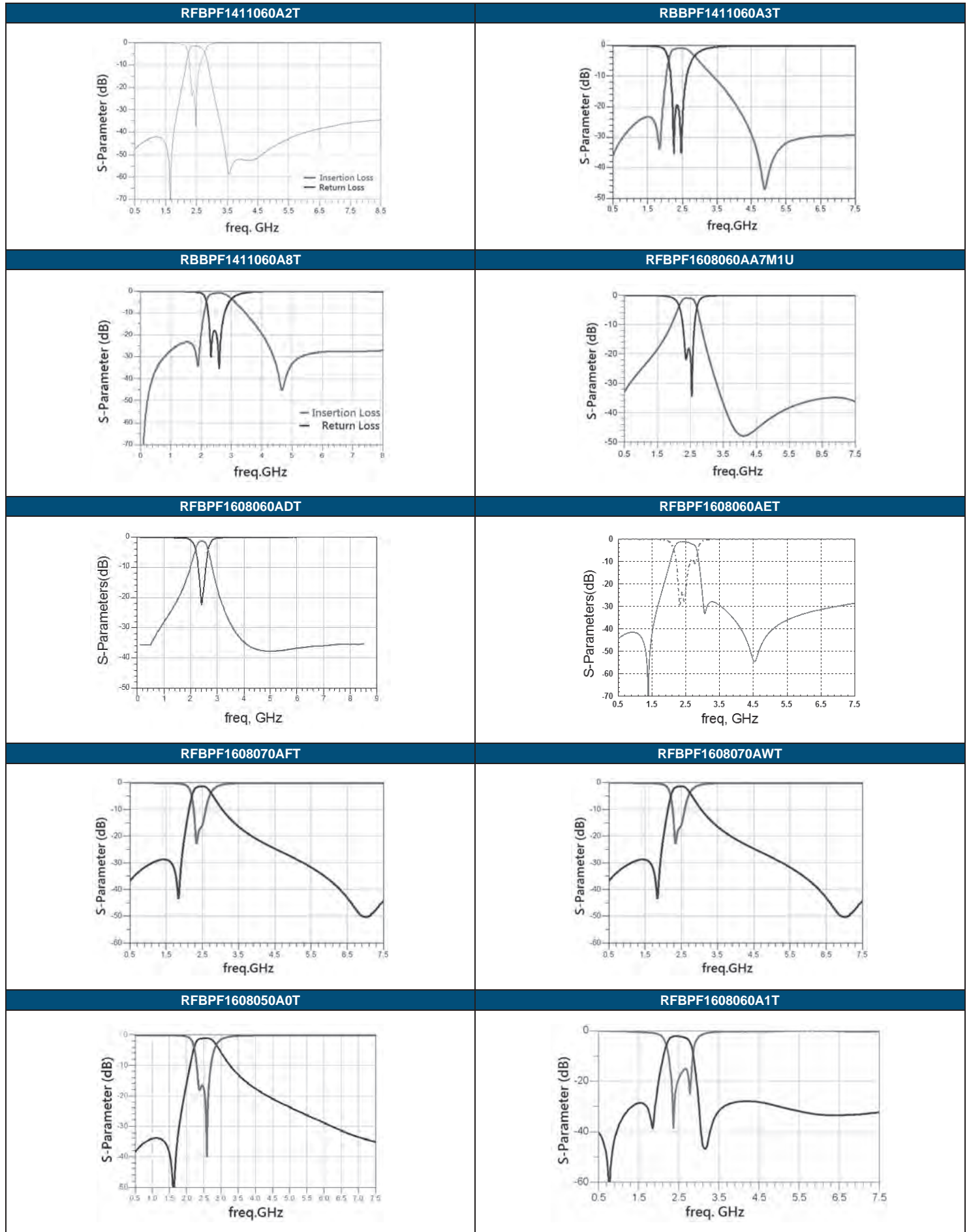
LTE Band Application

Part Number	Frequency Range(MHz)	Insertion Loss (dB)	Attenuation (dB min.)	VSWR (max.)	Impedance (Ω)	Size(mm)	STRUCTURE
RFBPF1109B101T	2110-2170	1.7	25(4280MHz)	2	50	1.10x0.90x0.60	E
RFBPF1109B201T	1930-1990	1.7	25(3920MHz)	2	50	1.10x0.90x0.60	E
RFBPF1109B301T	1805-1880	1.4	25(3685MHz)	2	50	1.10x0.90x0.60	E
RFBPF1109B501T	869-894	0.9	12(1763MHz)	2	50	1.10x0.90x0.60	E
RFBPF1109B701T	2620-2690	1.2	25(5310MHz)	2	50	1.10x0.90x0.60	E
RFBPF1109B801T	925-960	0.9	12(1885MHz)	2	50	1.10x0.90x0.60	E
RFBPF16081G9DM1T79	1805-2025	1.6max.(25°C) 1.8max.(-40~+85°C)	25(700-950MHz) 15(950-1050MHz) 25(2400-2500MHz) 35(2700-5150MHz) 40(5150-5850MHz) 25(5850-12750MHz)	2	50	1.60x0.80x0.70	G
RFBPF16081G9DMAT79	1880-2025	2.0max.(25°C) 2.2max.(-40~+85°C)	20(1545-1610MHz) 25(2400-2500MHz) 25(5150-5850MHz)	2	50	1.60x0.80x0.70	G
RFBPF16081G9DS8T60	1805-2025	1.6	30(700-950MHz) 15(950-1050MHz) 25(2400-2500MHz) 35(2700-5400MHz) 35(5500-6200MHz) 35(9350-10150MHz) 20(10500-12750MHz)	2	50	1.60x0.80x0.70	G

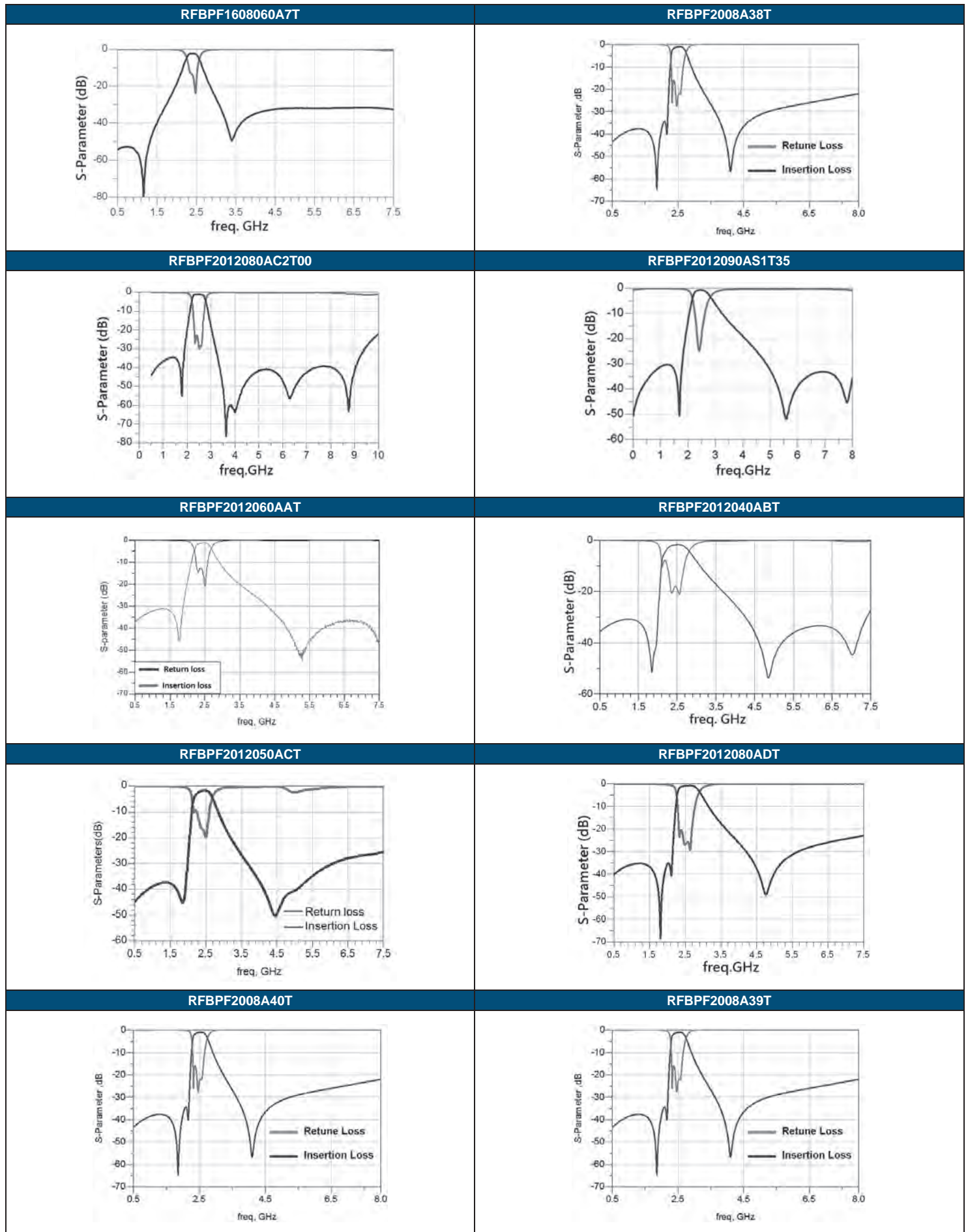
■ **TYPICAL ELECTRICAL CHARACTERISTICS**



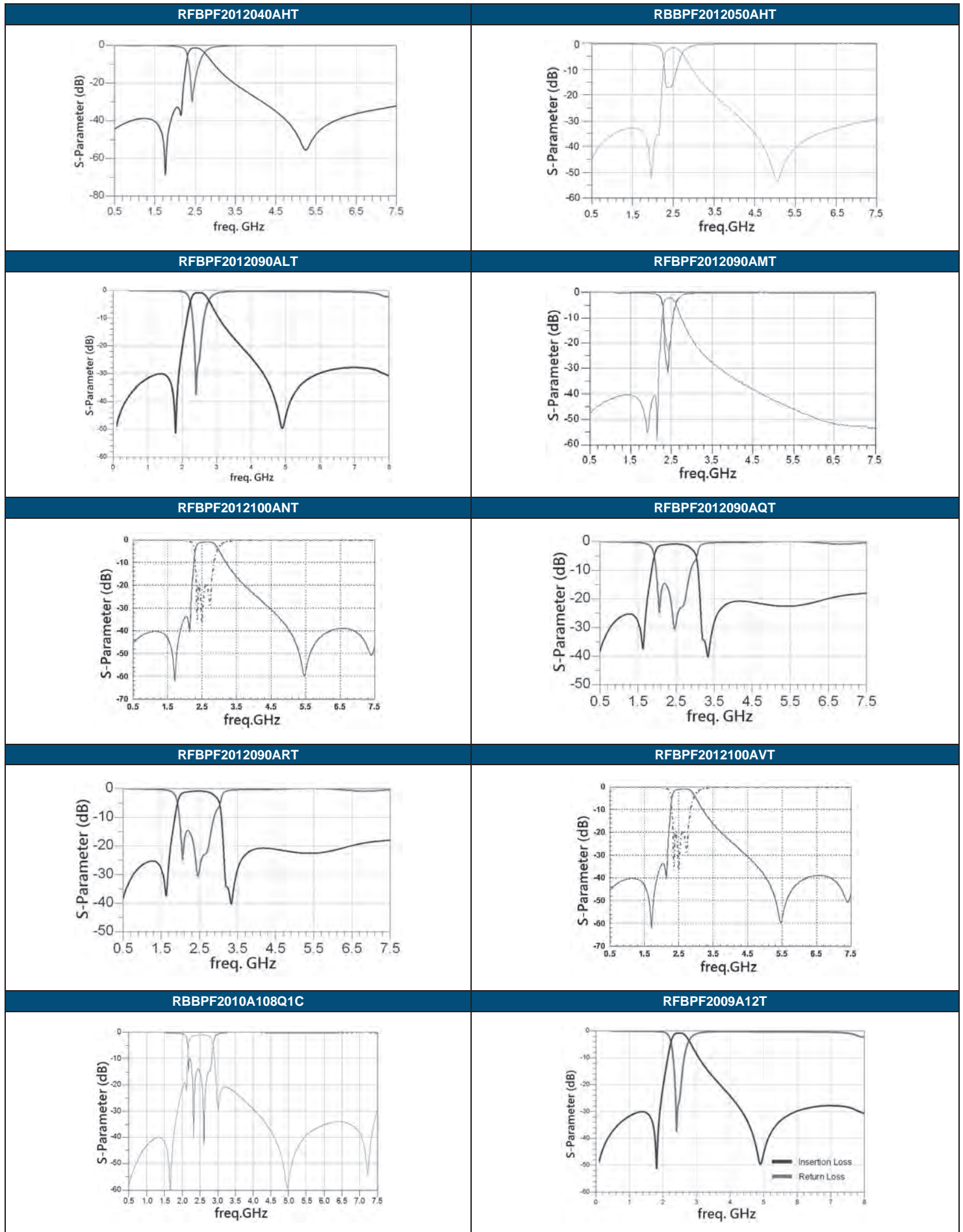
TYPICAL ELECTRICAL CHARACTERISTICS



TYPICAL ELECTRICAL CHARACTERISTICS

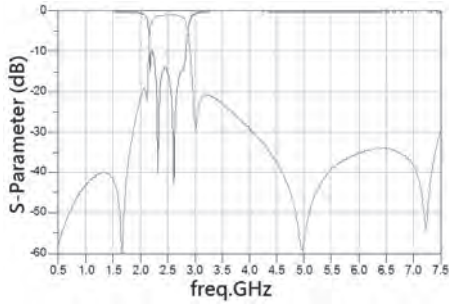


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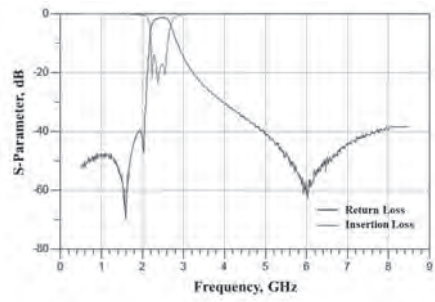


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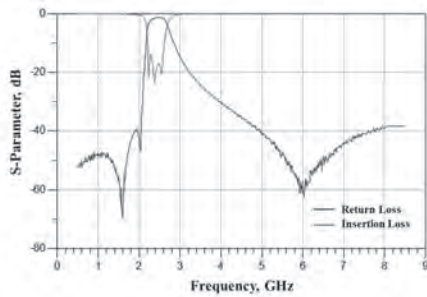
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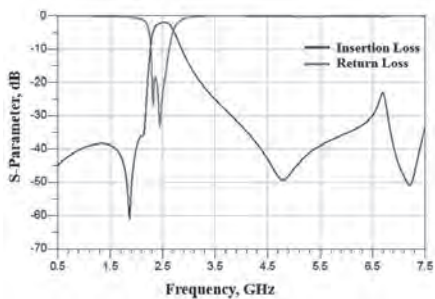
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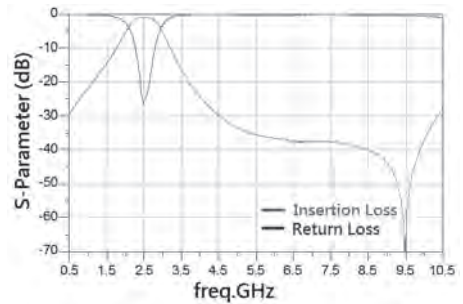
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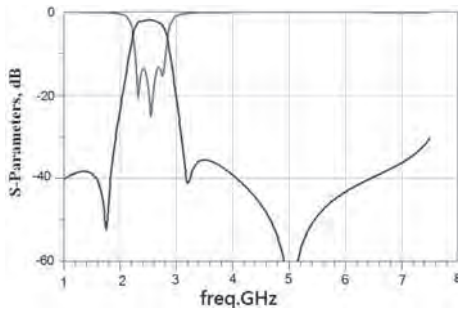
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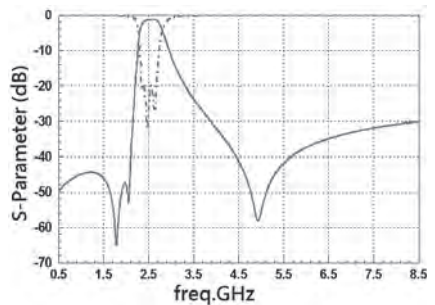
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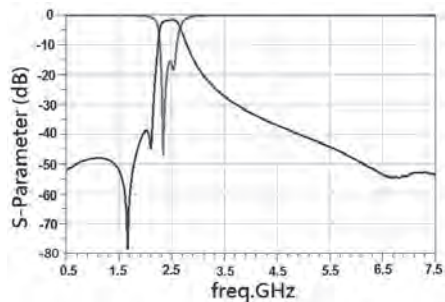
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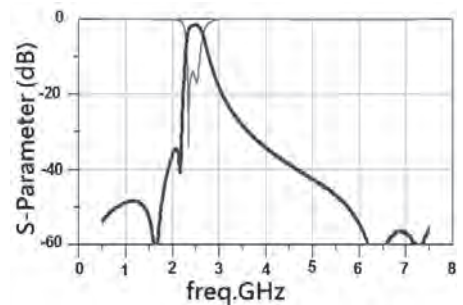
RFBPF2520090ACT



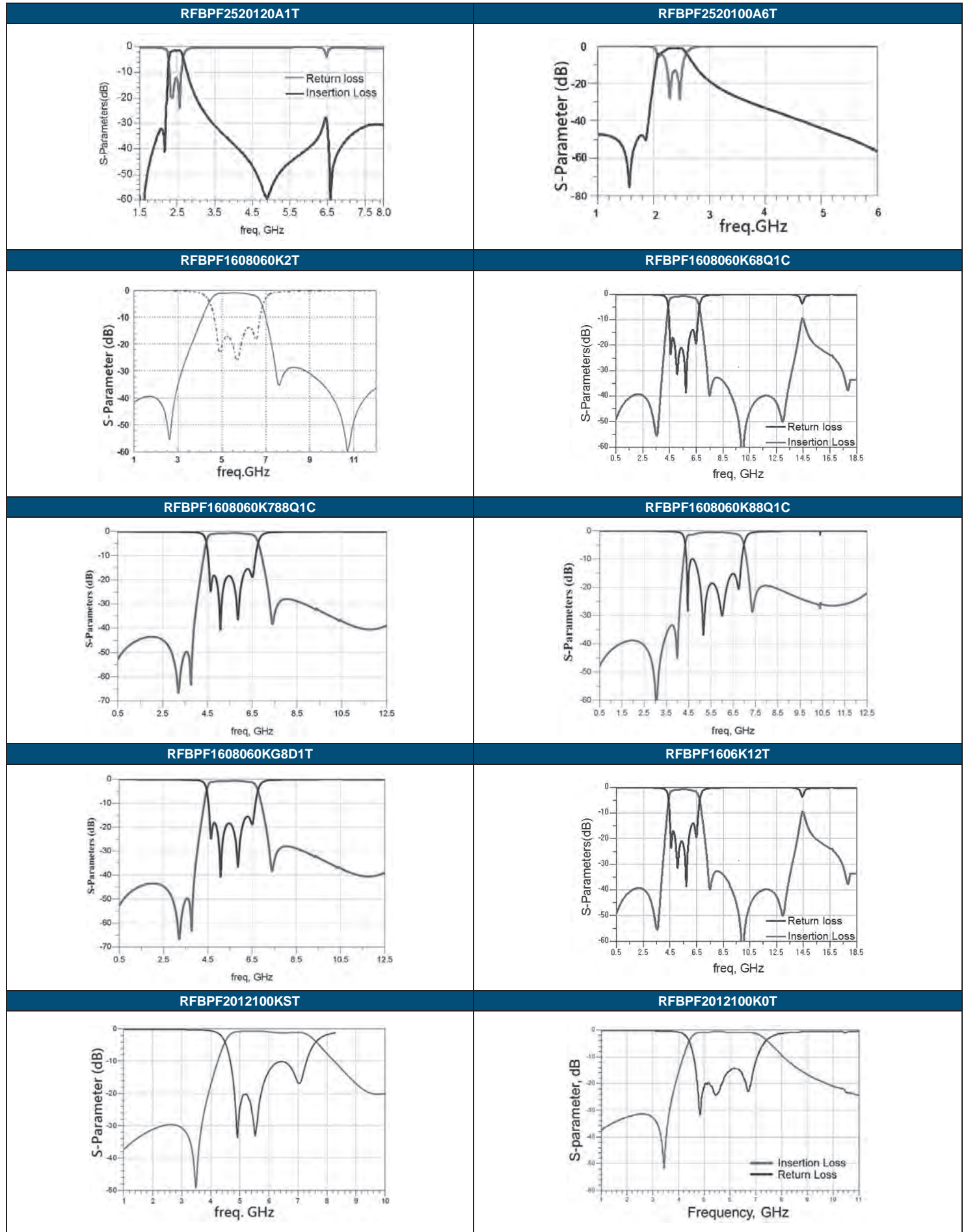
RFBPF2520070AMT



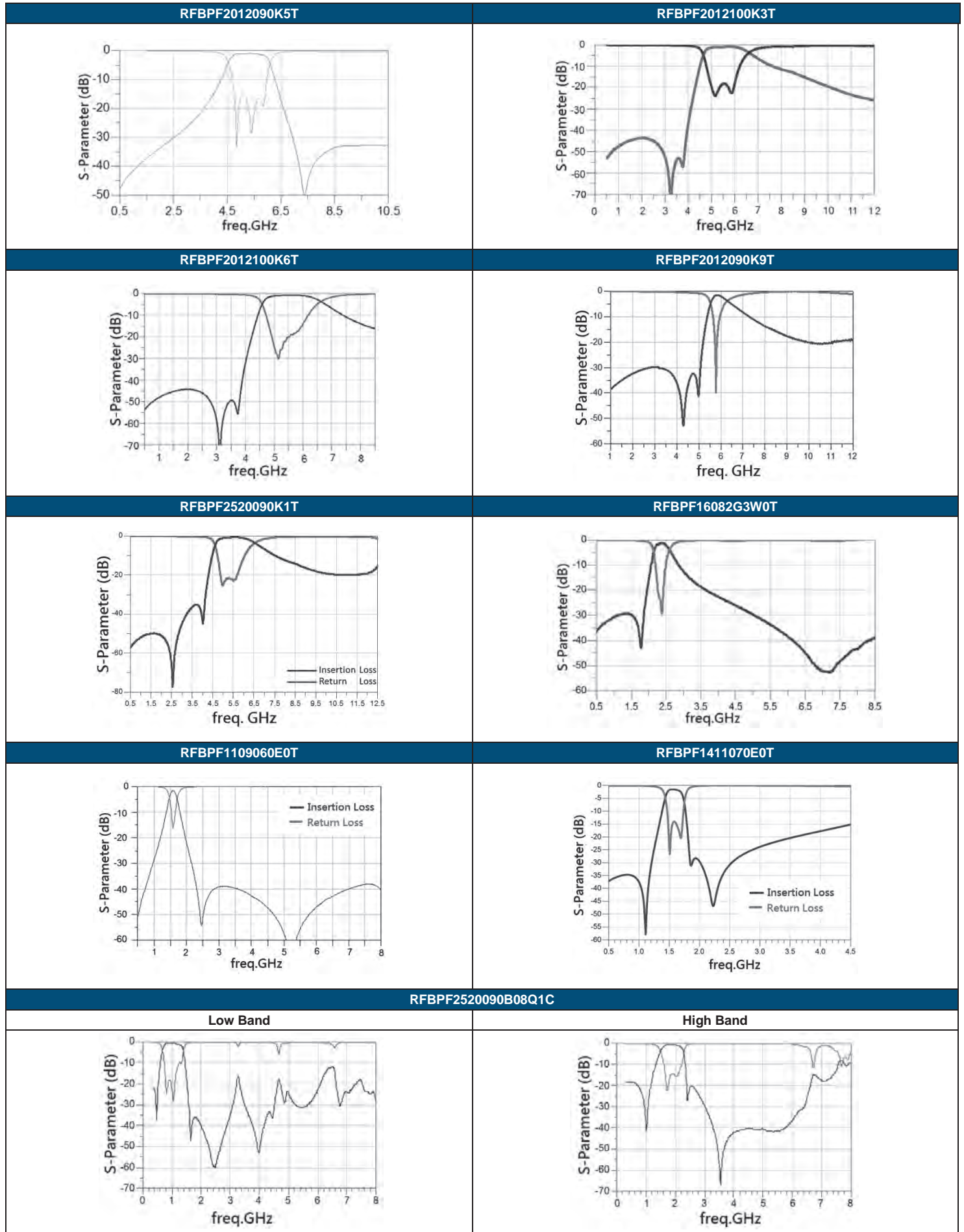
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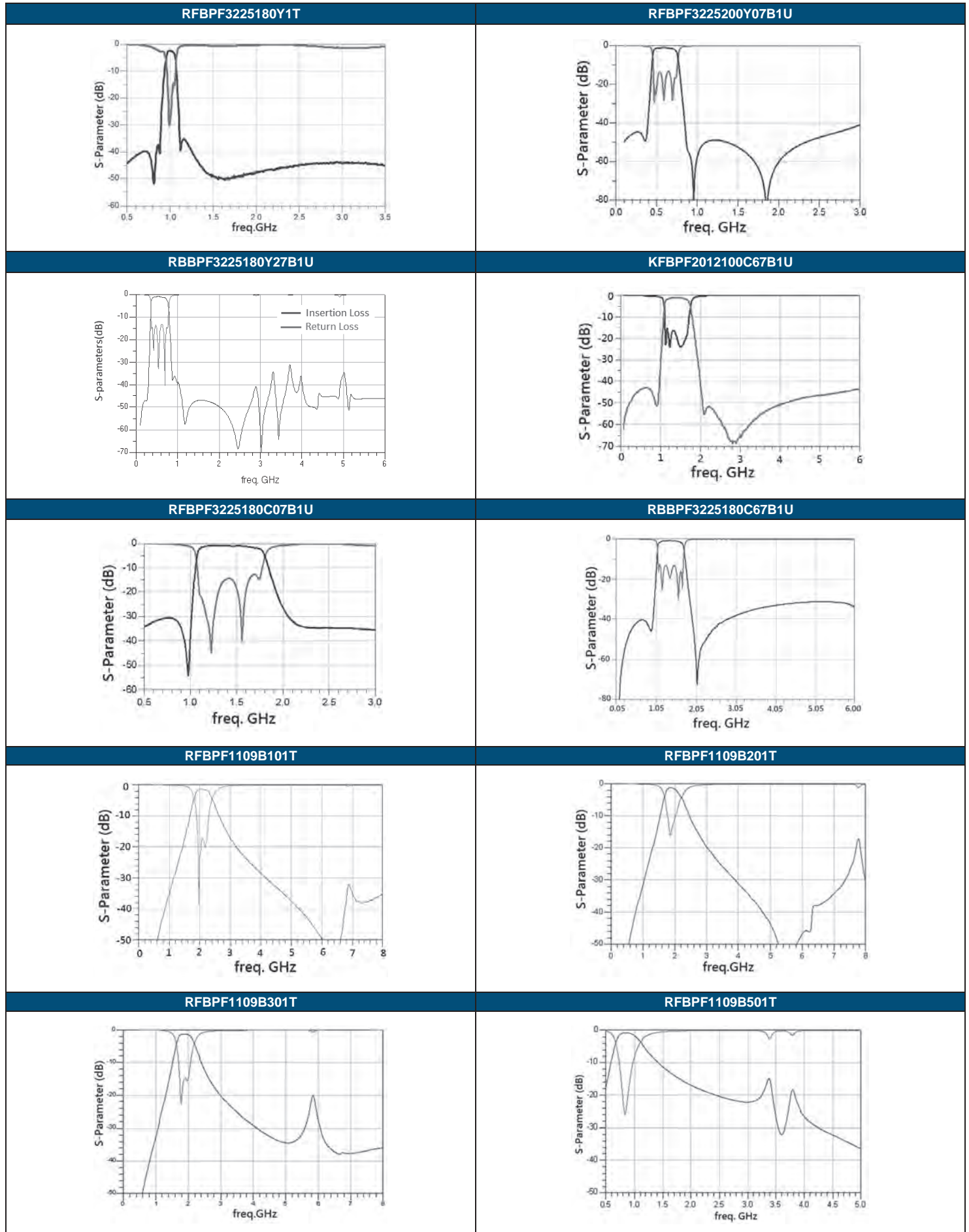
TYPICAL ELECTRICAL CHARACTERISTICS



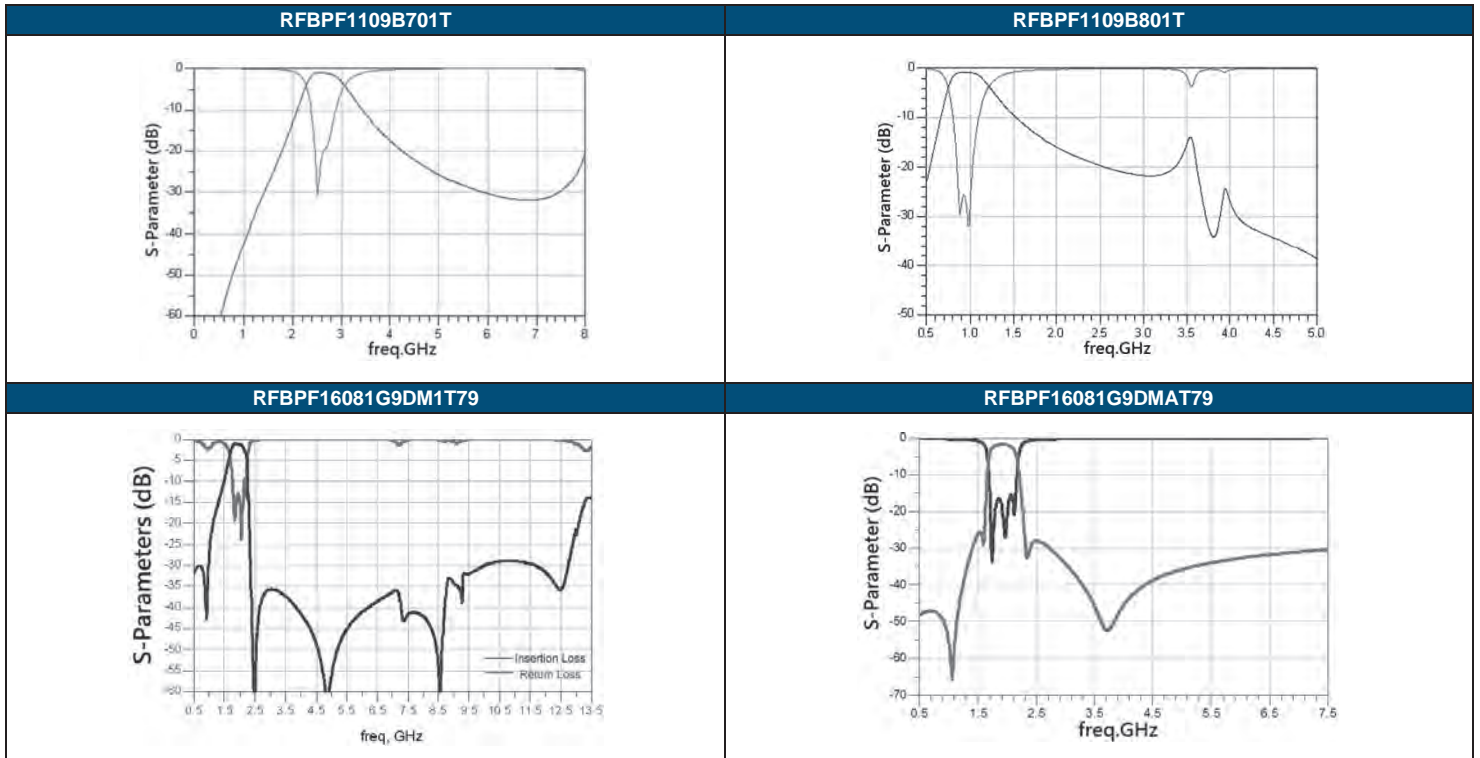
TYPICAL ELECTRICAL CHARACTERISTICS



TYPICAL ELECTRICAL CHARACTERISTICS



TYPICAL ELECTRICAL CHARACTERISTICS



- For more information, please contact with local sales representative
- All specifications are subject to change without notice

HIGH FREQUENCY MULTILAYER BALANCED FILTER

■ **STRUCTURE AND PIN ASSOCIATED**

STRUCTURE A

STRUCTURE A-1

STRUCTURE A-2

STRUCTURE B

■ **STRUCTURE AND DIMENSION**

Unit: mm

Structure\ Dimension	L	W	T	A	B	C	D	E	F	G	
A	1.60±0.15	0.80±0.15	0.60±0.10	0.175±0.15	0.25±0.15	0.25±0.15	0.50±0.15	0.20±0.15	0.20±0.15	0.30±0.15	
	2.00±0.15	1.25±0.15	1.20±0.10	0.40±0.10	0.175±0.10	0.35±0.15	0.30±0.15	0.65±0.10	0.20±0.10	0.20±0.15	0.50±0.10
			0.50±0.10	0.20±0.15	0.30±0.15	0.35±0.15	0.35±0.15	0.65±0.15	0.20±0.15	0.20±0.15	0.30±0.15
			0.60±0.10	0.20±0.15	0.30±0.10	0.35±0.10	0.35±0.10	0.65±0.10	0.20±0.15	0.20±0.15	0.50±0.10
			0.90±0.10	0.20±0.15	0.30±0.10	0.35±0.10	0.35±0.10	0.65±0.10	0.20±0.15	0.20±0.15	0.30±0.10
			1.00±0.10	0.20±0.15	0.30±0.10	0.35±0.10	0.35±0.10	0.65±0.10	0.20±0.10	0.20±0.15	0.50±0.10
			1.10±0.10	0.20±0.15	0.30±0.10	0.35±0.10	0.35±0.10	0.65±0.10	0.20±0.15	0.20±0.15	0.55±0.10
	2.50±0.20	2.00±0.20	0.85±0.10	0.35±0.20	0.40±0.10	0.30±0.10	0.70±0.20	0.15(Typical)	0.15(Typical)	1.20±0.20	
B	1.95±0.15	1.25±0.15	0.80±0.10	0.175±0.15	0.30±0.15	0.35±0.15	0.65±0.15	0.25±0.15	-	-	
	2.00±0.15	1.25±0.10	0.60±0.10	0.20±0.10	0.30±0.15	0.35±0.15	0.65±0.10	0.25±0.10	-	-	

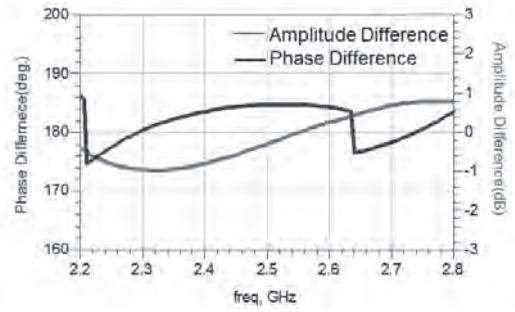
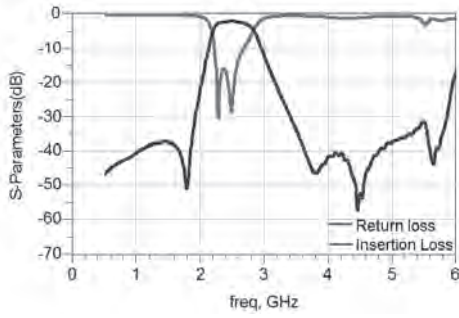
■ ELECTRICAL SPECIFICATION

2.4GHz BAND WORKING FREQUENCY

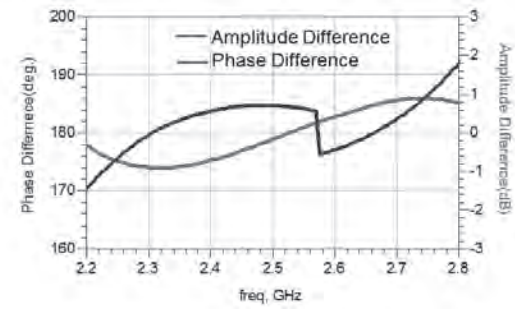
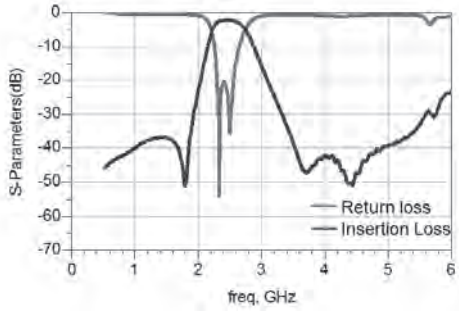
Part Number	Frequency Range (MHz)	Impedance(Ω)		Insertion Loss (dB)	Attenuation (dB min.)	VSWR (Max.)	Phase Difference	Amplitude Difference	Size (mm)	STRUCTURE
		Unbalance	Balance							
RFBPB2012090A1T	2.4-2.5	50	Conjugate match to BC series of Bluetooth chipset	3.5	35(880-960MHz) 30(1710-1880MHz) 20(1880-1990MHz) 30(4800-5000MHz)	2.1	180°± 10	2	2.00x1.25x0.90	A-1
RFBPB2012090A9T	2.4-2.5	50	Conjugate match to BC series of Bluetooth chipset	2.8	35(880-960MHz) 30(1575MHz) 25(1710-1880MHz) 30(4800-5000MHz)	2.1	180°± 10	2	2.00x1.25x0.90	A-1
RFBPB2012090AAT	2.4-2.5	50	Conjugate match to CSR BC03/ 04 series	3.5	35(880-960MHz) 30(1710-1880MHz) 20(1880-1990MHz) 30(4800-5000MHz)	2.1	180°± 10	2	2.00x1.25x0.90	A-1
RFBPB2012060ABT	2.4-2.5	50	Impedance match to T.I. CC253X,CC254X, CC257X, CC853X and CC852X Chipsets	1.5max.(25°C) 1.7max. (-40~+85°C)	12(1000MHz) 15(4800-5000MHz) 20(7200-7500MHz)	2.0	180°± 15	2	2.00x1.25x0.60	B
RFBPB2012080AET	2.4-2.5	50	Impedance match to: Atmel AT86RF232, AT86RF233, ATMega256RF R2, Zigbit 256RFR2, Zigbit RF233, ZigBit RF233+FEM, Extension RF233, USB RF233	1.5max.(25°C) 1.7max. (-40~+85°C)	20(4800-5000MHz) 20(7200-7500MHz)	2.0	180°± 10	2	1.95x1.25x0.80	B
RFBPB2012090AHT	2.4-2.5	50	100	3.5	30(880-960MHz) 30(1710-1880MHz) 20(1880-1990MHz) 30(4800-5000MHz)	2.0	180°± 10	2	2.00x1.25x0.90	A-1
RFBPB2012090AM1T59	2.4-2.5	50	Conjunction to MT5931/MT6628 Chipset	2.5 (typ.2.2)	35(824-960 MHz) 32(1990 MHz) 18(2170 MHz) 40(4800-5000MHz) 25(7200-7500MHz)	2.0	180°± 10	2	2.00x1.25x0.95	A-1
RFBPB2012090AM1T61	2.4-2.5	50	Conjugate match to MTK MT6611 Bluetooth chipset	2.8	35(880-960MHz) 30(1710-1880MHz) 20(1880-1900MHz) 30(4800-5000MHz)	2.1	180°± 10	2	2.00x1.25x0.90	A-1
RFBPB2012100A6T	2.4-2.5	50	Conjugate match to BC series of Bluetooth chipset	3.5	35(880-960MHz) 30(1710-1880MHz) 20(1880-1900MHz) 40(4800-5000MHz)	2.0	180°± 10	2	2.00x1.25x1.00	A-1
RFBPB2012110A5T	2.4-2.5	50	50	2.8	30(880-960 MHz) 30(1710-1880MHz) 20(1880-1990 MHz) 30(4800-5000 MHz)	2.0	180°± 10	2	2.00x1.25x1.10	A-1
RFBPB2520090A7T	2.4-2.5	50	Conjugate match to TI BRF6150	3.5	35(880-960MHz) 30(1710-1880MHz) 25(1880-1990MHz) 25(4800-5000MHz)	2.0	180°± 15	1.5	2.50x2.00x0.90	A-2

■ **TYPICAL ELECTRICAL CHARACTERISTICS**

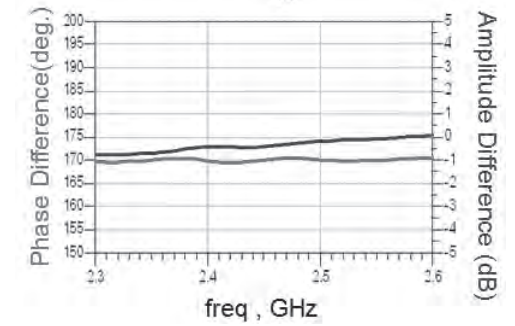
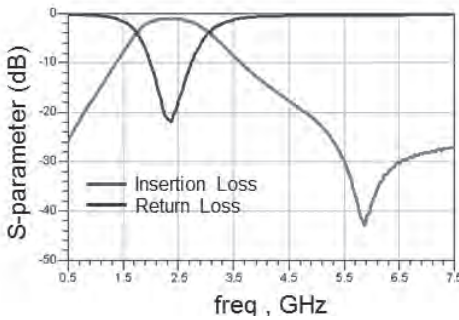
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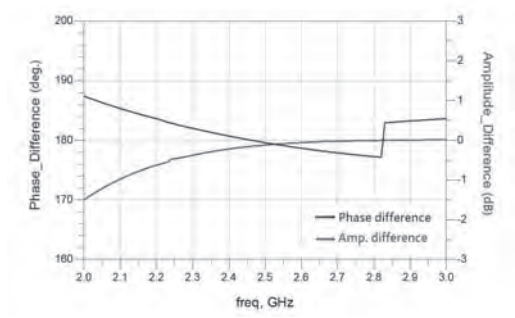
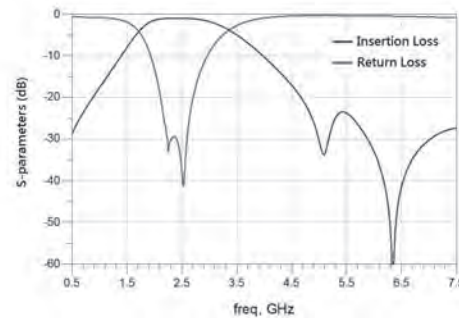
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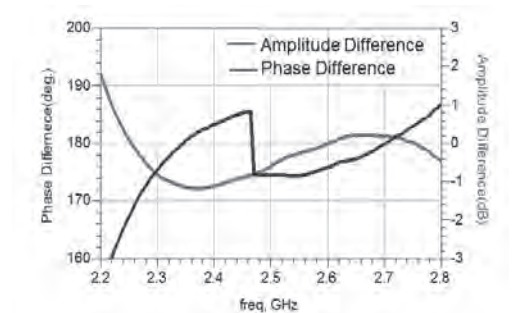
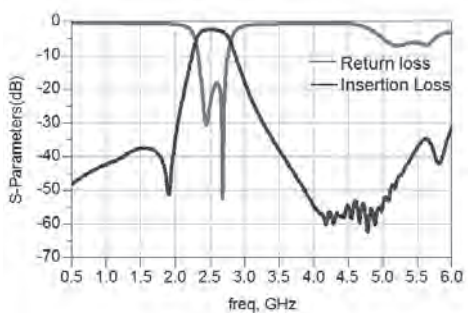
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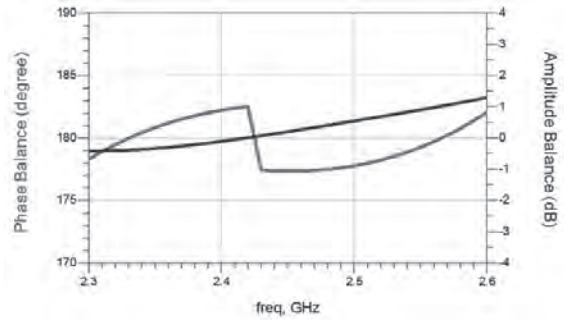
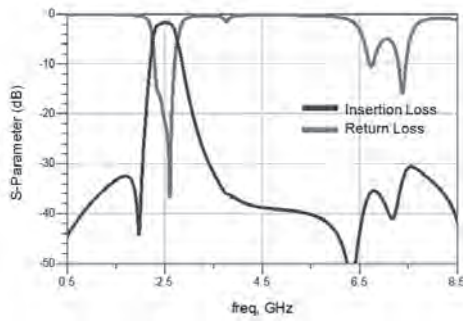


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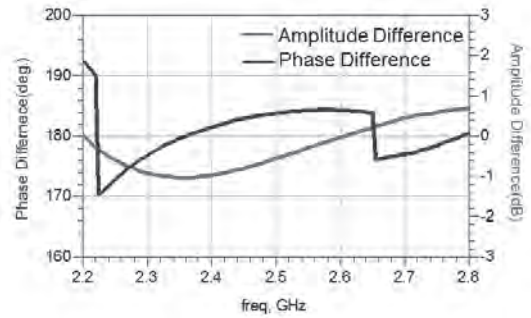
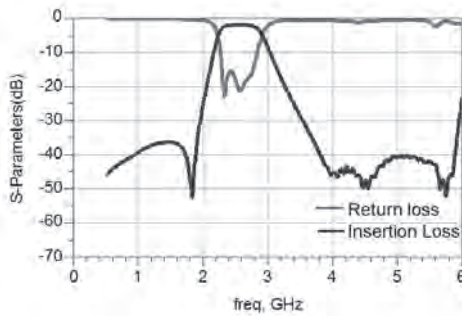


TYPICAL ELECTRICAL CHARACTERISTICS

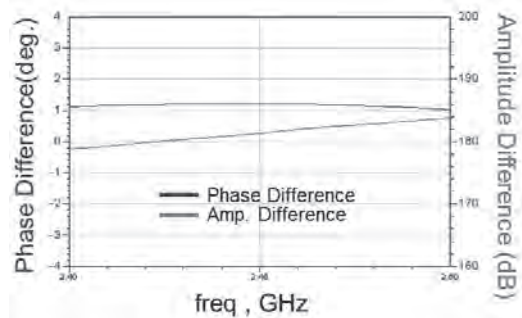
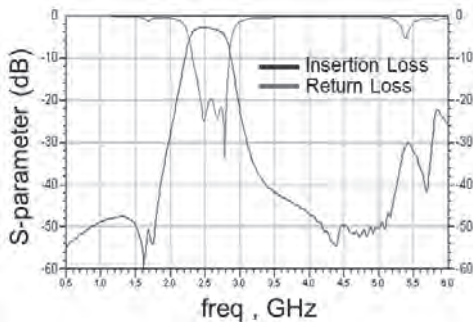
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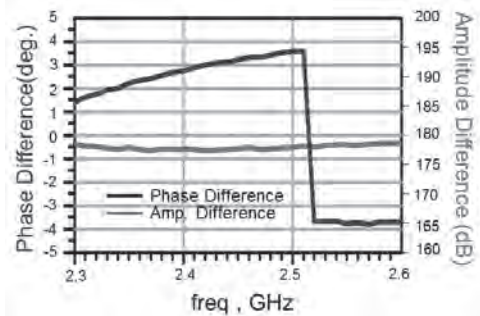
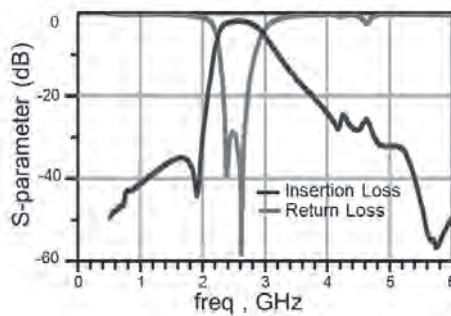
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RFBPB2012100A6T



RFBPB2012090AM1T61



- For more information, please contact with local sales representative
- All specifications are subject to change without notice

HIGH FREQUENCY MULTILAYER LOW PASS FILTER

■ **STRUCTURE AND PIN ASSOCIATED**

STRUCTURE A		STRUCTURE C			
	<p>STRUCTURE A-1</p>	<p>STRUCTURE A-2</p>			
	<p>STRUCTURE A-3</p>	<p>STRUCTURE A-4</p>			
STRUCTURE B					
	<p>STRUCTURE B-1</p>	<p>STRUCTURE B-2</p>			
	<p>STRUCTURE B-1</p>	<p>STRUCTURE B-2</p>			
STRUCTURE D	STRUCTURE E	STRUCTURE F	STRUCTURE G	STRUCTURE H	STRUCTURE I

■ **STRUCTURE AND DIMENSION**

Unit: mm

Structure\Dimension	L	W	T	A	B	C	D	E	F
A	1.60±0.15	0.80±0.15	0.50max.	0.20±0.10	0.24±0.10	0.24±0.10	0.50±0.10	0.15±0.10	-
			0.60±0.10	0.175±0.15	0.25±0.15	0.25±0.15	0.50±0.15	0.20±0.15	-
			0.65±0.10	0.175±0.15	0.25±0.15	0.25±0.15	0.50±0.15	0.20±0.15	-
			0.70max.	0.175±0.15	0.25±0.15	0.25±0.15	0.50±0.15	0.20±0.15	-
B	2.00±0.15	1.25±0.10	0.90±0.10	0.20±0.10	0.30±0.10	0.35±0.10	0.65±0.10	0.20±0.10	0.20±0.10
			0.95±0.10	0.20±0.10	0.30±0.10	0.35±0.10	0.65±0.10	0.20±0.10	0.20±0.10
			1.05±0.10	0.20±0.10	0.30±0.10	0.35±0.10	0.65±0.10	0.20±0.10	0.20±0.10
	3.20±0.20	2.50±0.20	1.00±0.20	0.10min.	0.55±0.15	0.45±0.15	1.00±0.15	0.30±0.15	0.70±0.20
C	1.00±0.10	0.50±0.10	0.40±0.10	0.35±0.10	0.30±0.10	0.15±0.10	0.15±0.10	0.30±0.10	-
	1.60±0.15	0.80±0.15	0.50max.	0.45±0.15	0.70±0.15	0.20±0.15	0.20±0.15	0.30±0.15	0.25±0.15
D	0.65±0.10	0.50±0.10	0.40max.	0.225±0.10	0.20±0.05	0.10±0.05	0.25±0.05	0.025±0.25	-
E	1.60±0.15	0.80±0.15	0.65max.	0.23±0.05	0.40±0.10	0.30±0.10	0.65±0.10	0.20±0.05	0.23±0.05
			0.60±0.10	0.23±0.05	0.40±0.10	0.30±0.10	0.65±0.10	0.20±0.05	0.23±0.05
			0.70max.	0.25±0.10	0.40±0.10	0.23±0.10	0.55±0.10	0.21±0.10	0.195±0.10
F	1.60±0.10	0.80±0.10	0.65max.	0.55±0.10	0.25±0.10	0.25±0.10	0.40±0.10	0.12±0.10	0.125±0.10
				0.60±0.10	0.25±0.10	0.25±0.10	0.40±0.10	0.10±0.05	0.10±0.05
	2.00±0.15	1.25±0.10	0.90±0.10	0.95±0.10	0.275±0.10	0.25±0.10	0.60±0.10	0.175±0.10	0.15±0.10
			1.00max.	0.95±0.10	0.275±0.10	0.25±0.10	0.60±0.10	0.175±0.10	0.15±0.10
G	1.00±0.10	0.50±0.10	0.40 max.	0.18±0.05	0.18±0.05	0.05±0.05	0.125±0.05	0.15±0.05	0.05±0.05
H	3.20±0.20	2.50±0.20	1.00±0.20	0.95±0.20	0.60±0.20	0.30±0.15	0.70±0.15	1.20±0.15	2.00±0.15
			1.80±0.20	0.95±0.20	0.60±0.20	0.30±0.15	0.70±0.15	1.20±0.15	2.00±0.15
I	1.60±0.15	0.80±0.10	0.70±0.10	0.20±0.10	0.50±0.10	0.35±0.10	0.15±0.10	-	-

■ **ELECTRICAL SPECIFICATION**

GSM850/900GHz BAND WORKING FREQUENCY

Part Number	Frequency Range (MHz)	Insertion Loss (dB)	Attenuation (dB min.)	VSWR (max.)	Impedance (Ω)	Size(mm)	Structure
RFLPF06050G9D0T	824-915	0.5max.(25°C) 0.7max.(-40~+85°C)	20(2400-2750MHz)	2.0	50	0.65x0.50x0.40	D
RFLPF06050G9D2T	699-960	0.5max.(25°C) 0.7max.(-40~+85°C)	20(2400-2750MHz)	2.0	50	1.00x0.50x0.40	D
RFLPF10050G9D0T	824-915	0.6	25(1648-1830MHz) 25(2472-2745MHz) 25(3296-3660MHz)	2.0	50	1.00x0.50x0.40	C
RFLPF10050G9D3T	824-915	0.5max.(25°C) 0.7max.(-40~+85°C)	25(1648-1830MHz) 25(2472-2745MHz) 25(3296-3660MHz)	2.0	50	1.00x0.50x0.40	C
RFLPF10050G9D4T	699-915	0.5max.(25°C) 0.7max.(-40~+85°C)	25(1648-1830MHz) 25(2472-2745MHz) 25(3296-3660MHz)	2.0	50	1.00x0.50x0.40	C
RFLPF10050G9D58Q1C	814-915	0.5max.(25°C) 0.65max.(-40~+85°C)	18(1648-1830MHz) 17(2472-2745MHz)	2.0	50	1.00x0.50x0.40	C
RFLPF16080G9D4T	698-960	0.60(698-830MHz) 0.70(830-900MHz) 0.75(900-915MHz) 0.90(915-960MHz)	30(1554-1830MHz) 35(2097-2745MHz)	1.6	50	1.60x0.80x0.65	A-3
RFLPF16080G9DET	698-960	0.4max.(25°C) 0.45max.(-40~+85°C)	15(1574-1605MHz) 23(1648-1830MHz) 23(1805-1850MHz) 23(4944-5850MHz)	2.0	50	1.60x0.80x0.60	E
RFLPF16080G9DJT	434-960	0.6max.(25°C) 0.8max.(-40~+85°C)	25(1554-1610MHz) 30(1710-2700MHz)	2.0	50	1.60x0.80x0.65	A-1
RFLPF16080G9DM1T58	698-960	0.8	16(1565-1610MHz) 32(2110-2155MHz)	2.0	50	1.60x0.80x0.50	A-4
RFLPF10050G9DM1T76	698-960	0.6max.(25°C) 0.65max.(-40~+85°C)	13(1554-1610MHz) 35(1805-1830MHz) 35(2110-2170MHz) 30(1710-2700MHz)	2.0	50	1.00x0.50x0.40	G
RFLPF20120G9D0T	890-915	0.6max.(25°C) 0.75max.(-40~+85°C)	30(1780-1830MHz) 30(2670-2745MHz)	2.0	50	2.00x1.25x0.95	B-2
RFLPF20120G9D1T	890-915	0.6max.(25°C) 0.75max.(-40~+85°C)	40(1720-1765MHz) 30(1780-1830MHz) 30(2670-2745MHz)	2.0	50	2.00x1.25x0.95	B-2

DCS/PCS BAND WORKING FREQUENCY

Part Number	Frequency Range (MHz)	Insertion Loss (dB)	Attenuation (dB min.)	VSWR (max.)	Impedance (Ω)	Size(mm)	Structure
RFLPF10051G8D0T	1710-1910	0.8	35(3420-3570MHz) 35(3700-3820MHz) 35(5130-5730MHz)	2.0	50	1.00x0.50x0.40	C
RFLPF10051G8DM5T51	1710-1910	0.6	26(3420-3570MHz) 21(3700-3820MHz) 21(5130-5730MHz)	2.0	50	1.00x0.50x0.40	C
RFLPF10051G8D8T	1880-2025	1.4max.(25°C) 1.6max.(-40~+85°C)	10(2400-2500MHz) 22(3760-4050MHz) 22(5150-5850MHz) 22(5640-6075MHz)	2.0	50	1.00x0.50x0.40	G
RFLPF16081G8D3T	1710-1910	0.45max.(25°C) 0.55max.(-40~+85°C)	30(3420-3570MHz) 25(3700-3820MHz) 25(5130-5730MHz)	2.0	50	1.60x0.80x0.50	C
RFLPF16081G8D78Q1C	1880-2025	1.4	25(2400-2500MHz) 18(4020-4045MHz) 25(6030-6075MHz)	2.0	50	1.60x0.80x0.60	F
RFLPF16081G8DC8Q1C	1880-2170	0.60(1880-1920MHz) 0.70(1920-1980MHz) 0.80(2010-2170MHz) 2.00(2025-2170MHz)	15(2400-2500MHz) 20(3760-4050MHz) 12(5150-5850MHz) 12(5640-6075MHz) 5(7520-8100MHz)	2.0	20	1.60x0.80x0.60	E
RFLPF16081G8DHT	1710-1990	0.6max.(25°C) 0.8max.(-40~+85°C)	30.5(3420-3980MHz) 28.5(5130-5970MHz) 25.0(5970-12500MHz)	2.0	50	1.60x0.80x0.70	I
RFLPF20121G8D1T	1880-2025	1.35max.(25°C) 1.50max.(-40~+85°C)	38(2400-2500MHz) 25(4020-4045MHz) 27(6030-6075MHz)	1.9	50	2.00x1.20x0.90	F

2.4GHz BAND WORKING FREQUENCY

Part Number	Frequency Range (MHz)	Insertion Loss (dB)	Attenuation (dB min.)	VSWR (max.)	Impedance (Ω)	Size(mm)	Structure
RFLPF1005040A0T	2450±50	0.45max.(25°C) 0.55max.(-40~+85°C)	21(4800-5000MHz) 21(7200-7500MHz)	1.7	50	1.00x0.50x0.40	C
RFLPF1005040A1T	2450±50	0.75	33(4800-5000MHz) 37(7200-7500MHz)	2.0	50	1.00x0.50x0.40	C
RFLPF1005040A2T	2450±50	0.75max.(25°C) 0.90max.(-40~+85°C)	32(4800-5000MHz) 35(7200-7500MHz)	2.0	50	1.00x0.50x0.40	C
RFLPF1608060AAT	2450±50	0.65	20(3603-3720MHz) 30(4804-4960MHz) 10(6005-6200MHz) 20(7206-7440MHz) 10(8407-8680MHz) 20(9608-9920MHz) 10(10809-11160MHz) 10(12010-12400MHz) 10(13211-13640MHz) 15(14412-14880MHz) 10(15613-16120MHz) 10(16814-17360MHz)	2.0	50	1.60x0.80x0.70	A-1
RFLPF1608060ABT	2450±50	0.50	35(4800-5000MHz) 25(7200-7500MHz)	2.0	50	1.60x0.80x0.60	A-1
RFLPF1608060A0T	2450±50	0.65 (typ.0.48)	35(4800MHz(typ.40)) 27(7200MHz(typ.40))	1.5	50	1.60x0.80x0.60	A-1
RFLPF1608060A1T	2450±50	0.6	27(4800-5000MHz) 30(7200-7500MHz)	2.0	50	1.60x0.80x0.60	A-2
RFLPF1608060A2T	2450±50	0.42	25(4800MHz) 18(7200MHz)	1.5	50	1.60x0.80x0.60	A-1
RFLPF1608060A9T	2450±50	0.50max.(25°C) 0.60max.(-40~+85°C)	20(3400MHz) 20(3600MHz) 30(4800-5000MHz) 30(7200-7500MHz)	2.0	50	1.60x0.80x0.60	E
RFLPF2012110A0T	2450±50	0.7	30(2x(f0±BW/2)) 20(3x(f0±BW/2))	1.5	50	2.00x1.25x1.05	B-1

5GHz BAND WORKING FREQUENCY

Part Number	Frequency Range (MHz)	Insertion Loss (dB)	Attenuation (dB min.)	VSWR (max.)	Impedance (Ω)	Size(mm)	Structure
RFLPF1608050K0T	5400±500	0.60(25°C) 0.70(-40~+85°C)	25(9800MHz) 30(11900MHz) 20(17850MHz) (for reference)	2.0	50	1.60x0.85x0.50	C
RFLPF2012090K0T	5400±500	0.55(25°C) 0.65(-40~+85°C)	30(9800MHz) 30(11800MHz) 20(17550MHz) (for reference)	2.0	50	2.00x1.25x0.90	B-1

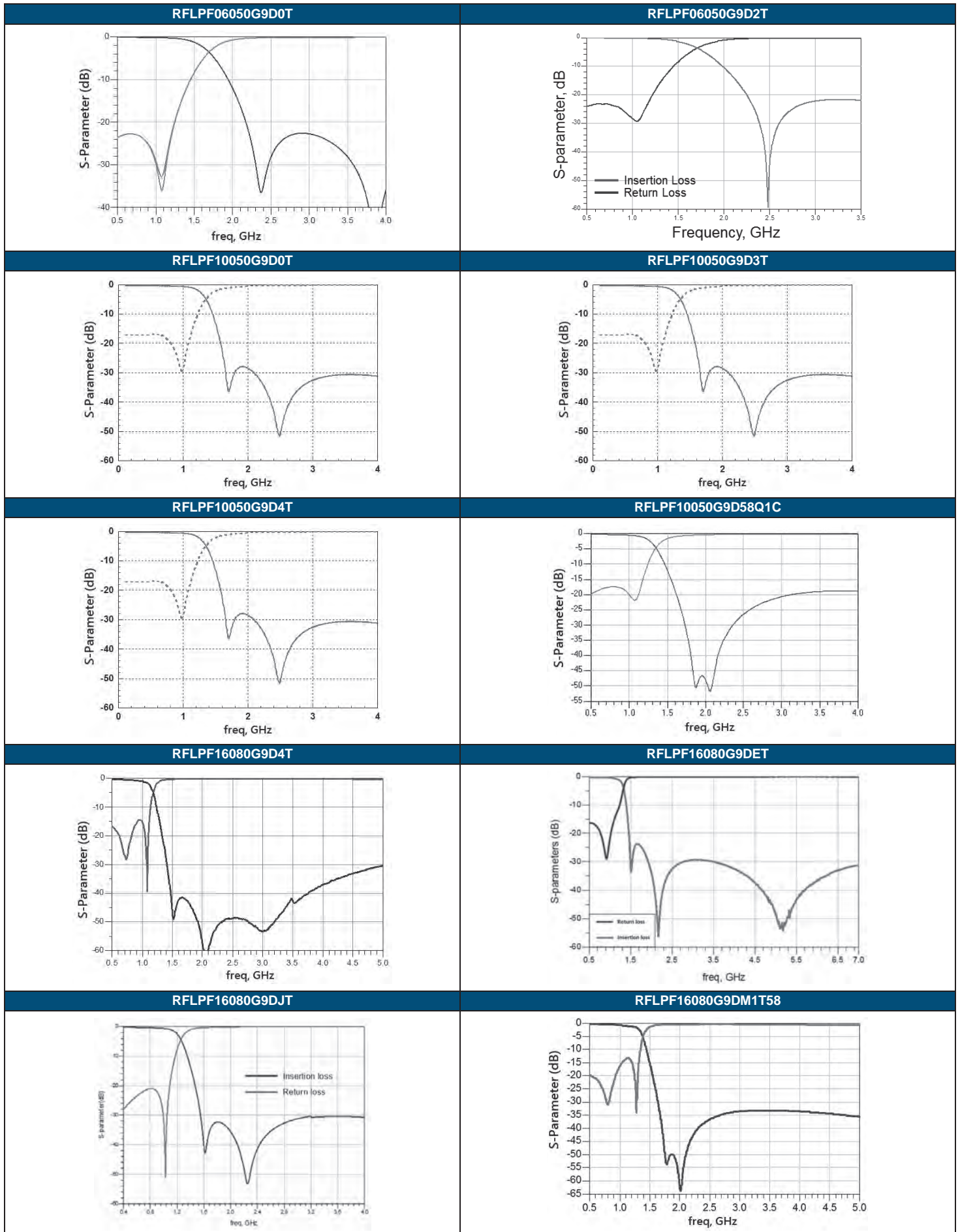
LTE BAND APPLICATION

Part Number	Frequency Range (MHz)	Insertion Loss (dB)	Attenuation (dB min.)	VSWR (max.)	Impedance (Ω)	Size(mm)	Structure
RFLPF1005040YM1T76	746-878	0.60(25°C) 0.65(-40~+85°C)	30(1554-1610MHz) 25(2238-2361MHz)	2.0	50	1.00x0.50x0.40	G
RFLPF1608060Y08Q1C	470-787	0.65(25°C) 0.71(-40~+85°C)	26(1429-1501MHz) 30(1565-1607MHz) 35(1570-1580MHz) 18(1920-1980MHz)	2.0	50	1.60x0.85x0.65	A-3
RFLPF1608060Y18Q1C	698-960	0.60(698-830MHz) 0.70(830-900MHz) 0.75(900-915MHz) 0.90(915-960MHz)	30(1554-1830MHz) 35(2097-2745MHz)	1.6	50	1.60x0.85x0.65	A-3
RFLPF2012090Y2T	400-470	0.50(25°C) 0.65(-40~+85°C)	33(800-940MHz)	2.0	50	2.00x1.25x0.90	F
RFLPF2012090Y3T	500-700	0.65(25°C) 0.80(-40~+85°C)	33(1000-1400MHz)	2.0	50	2.00x1.25x0.90	F
RFLPF2012100Y0T	DC-500	0.70	9(824-960MHz) 25(1710-1990MHz) 25(2400-4000MHz)	2.0	50	2.00x1.25x0.95	B-2
RFLPF1608060E0T	1400-2690	0.25(25°C) 0.30(-40~+85°C)	25(4905-5845MHz)	1.92	50	1.60x0.85x0.65	F
RFLPF1608060F0T	600-2700	0.50	30(4800-8000MHz) 25(8500-12500MHz)	2.0	50	1.60x0.85x0.65	F
RFLPF1608060F18Q1C	673-2690	0.50	35(4950-6000MHz) 35(6000-7500MHz) 35(7500-8100MHz) 35(8100-10500MHz) 27(10500-12500MHz)	2.0	50	1.60x0.85x0.65	F
RFLPF1608060F88Q1C	10-2700	0.5	30(4900-5950MHz)	2.0	50	1.60x0.85x0.65	E
RFLPF1608060FAT	673-2690	0.25(25°C) 0.35(-40~+85°C)	25(4905-5845MHz)	1.92	50	1.60x0.85x0.65	F
RFLPF2012100F18Q1C	1710-2170	1.30(25°C) 1.50(-40~+85°C)	15(2400-2500MHz) 25(3250-3350MHz) 25(3420-3570MHz) 23(3700-3820MHz) 23(3840-3960MHz) 23(4100-4600MHz) 25(4905-5845MHz) 23(5850-6400MHz) 20(6600-7350MHz)	1.56	50	2.00x1.25x1.00	B-2
RFLPF2012100F28Q1C	DC-2170	0.75(25°C) 0.85(-40~+85°C)	10(2400-2500MHz) 23(3250-3350MHz) 20(3420-3570MHz) 18(3700-3820MHz) 18(3840-3960MHz) 18(4100-4600MHz) 20(4905-5845MHz) 18(5850-6400MHz) 5(6600-7350MHz)	2.0	50	2.00x1.25x1.00	F
RFLPF16082G6W0T	2400-2690	0.6	26(4800-5390MHz) 23(7200-8085MHz)	2.0	50	1.60x0.80x0.60	A-2
RFLPF16082G6W2T	2300-2700	0.40(25°C) 0.43(-40~+85°C)	21(4600-5400MHz) 22(6900-8100MHz)	2.0	50	1.60x0.80x0.60	A-2
RFLPF16082G5W0T	2300-2700	0.90(25°C) 1.00(-40~+85°C)	30(4600-5400MHz) 30(6900-8100MHz) 20(9200-10800MHz) 15(11500-13500MHz)	1.8	50	1.60x0.80x0.60	A-1
RFLPF16082G5WM0T29	2300-2690	0.80 (typ.0.40)	25(4600-5400MHz) 25(6900-8070MHz)	2.0	50	1.60x0.80x0.60	A-1
RFLPF16083G5W7T	3300-3800	0.55	17(6600-7600MHz) 20(9900-11400MHz)	1.9	50	1.60x0.80x0.60	A-3
RFLPF2012090BM0T29	800-1000 1700-1910 2010-2025	0.5(800-1000MHz) 0.8(1700-1910MHz) 1.5(2010-2025MHz)	20(2300-3700MHz) 30(3700-4100MHz) 20(4100-6100MHz) 10(6100-8000MHz)	2.0	50	2.00x1.25x0.90	F

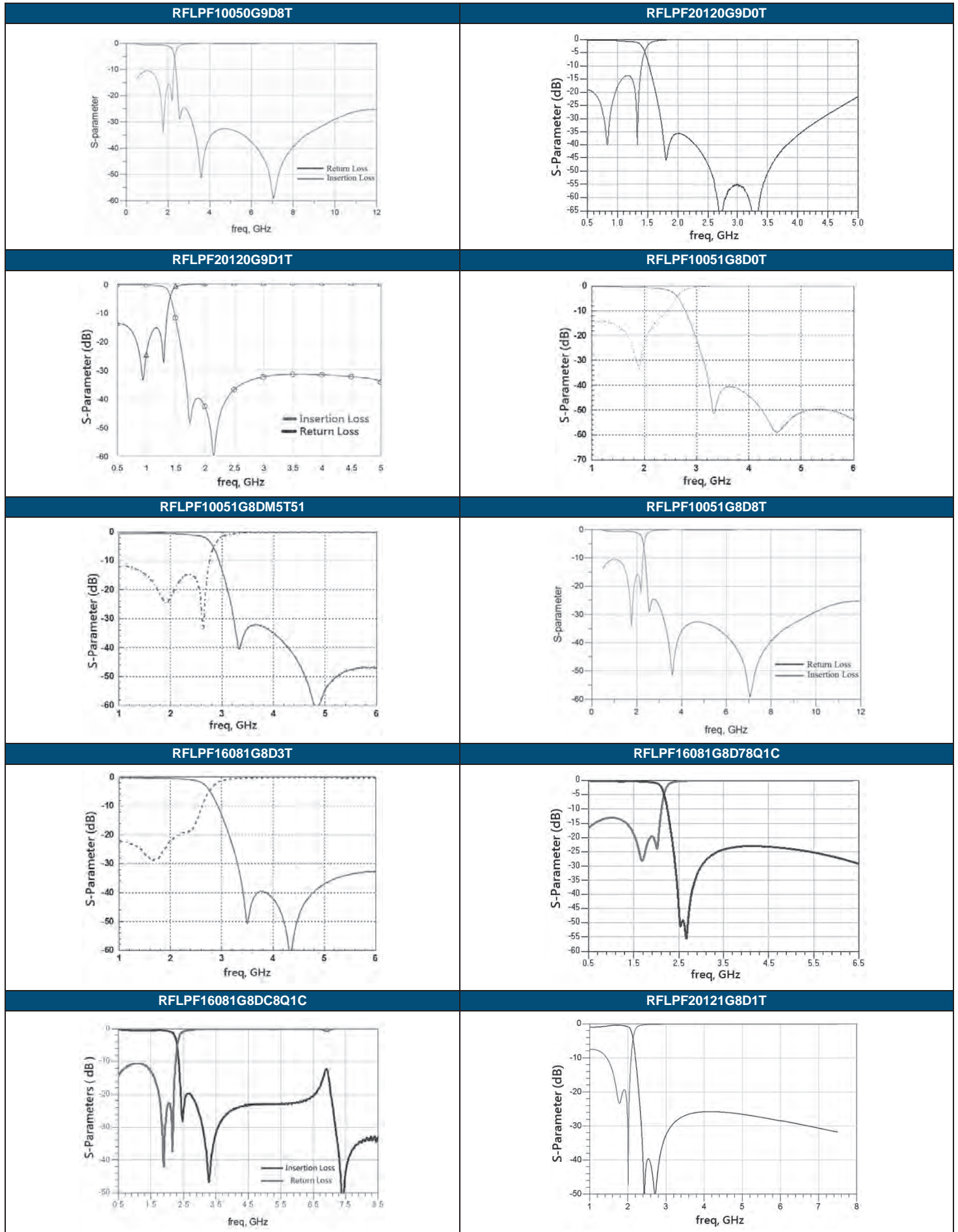
MoCA APPLICATION

Part Number	Frequency Range (MHz)	Insertion Loss (dB)	Attenuation (dB min.)	VSWR (max.)	Impedance (Ω)	Size(mm)	Structure
RFLPF3225180Y1T	54-870	2.5	35(975-1675MHz)	2.0	75	3.20x2.50x1.80	H
RFLPF3225100Q07B1U	5-1002	2.4(25°C) 2.6(-40~+85°C)	36(1125-1675MHz)	2.0	75	3.20x2.50x1.00	H
RFLPF3225100Q2T	5-1002	2.4(25°C) 2.6(-40~+85°C)	28(1125-1675MHz)	1.9	75	3.20x2.50x1.00	B-1
RFLPF3225200Q5T	5-1002	1.8(25°C) 2.05(-40~+85°C)	33(1125-1400MHz) 26(1400-1675MHz)	2.0	75	3.20x2.50x1.80	H

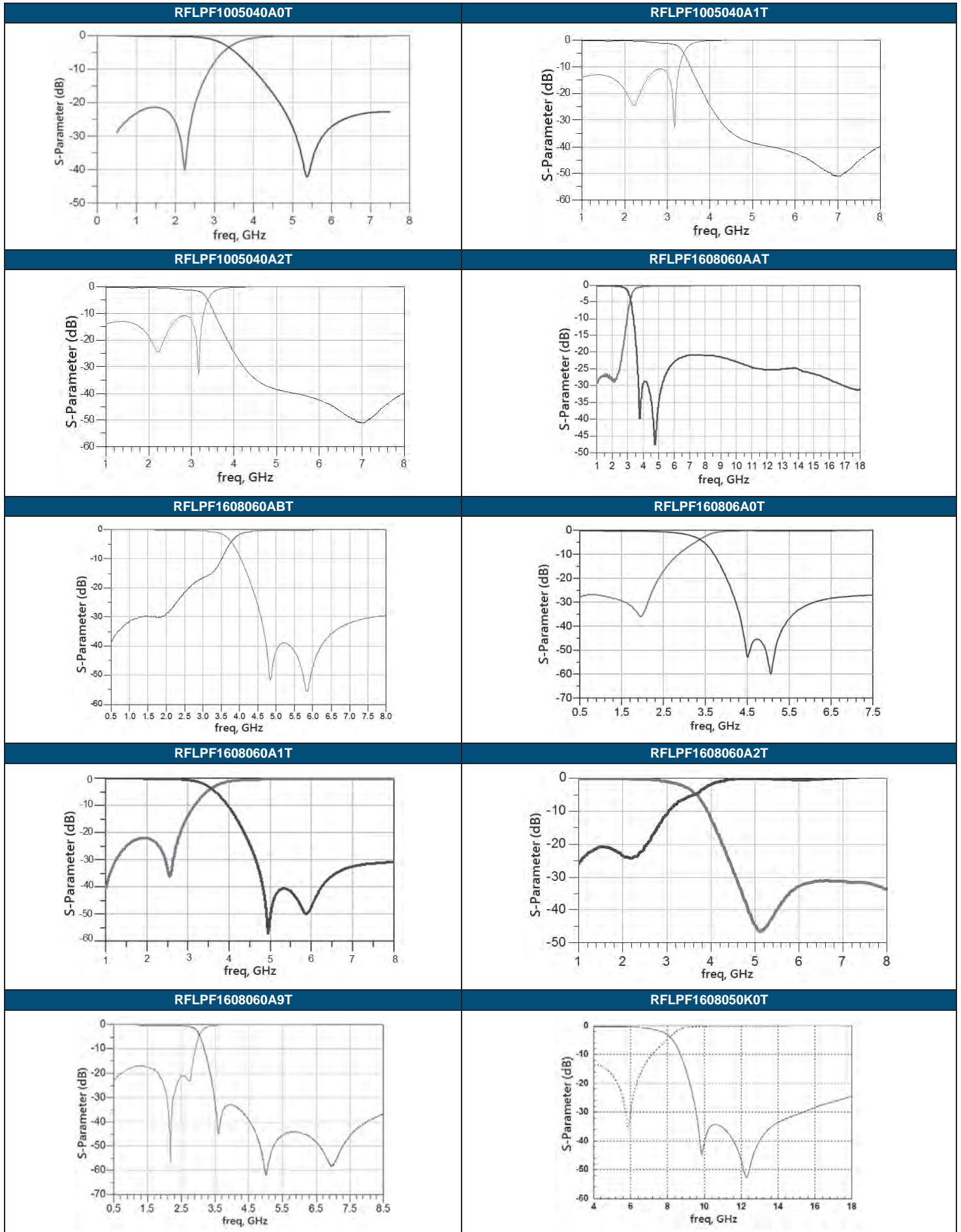
■ **TYPICAL ELECTRICAL CHARACTERISTICS**



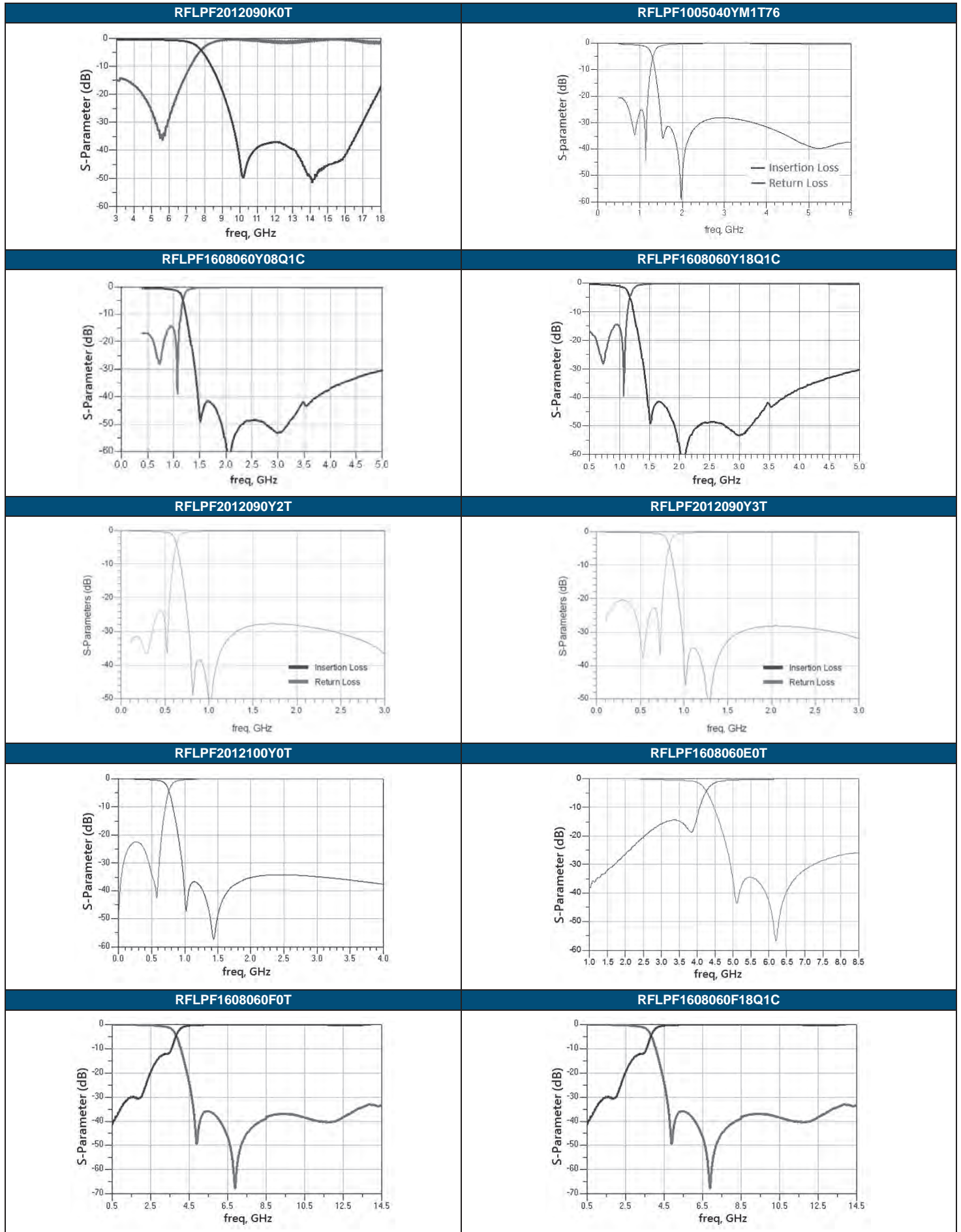
TYPICAL ELECTRICAL CHARACTERISTICS



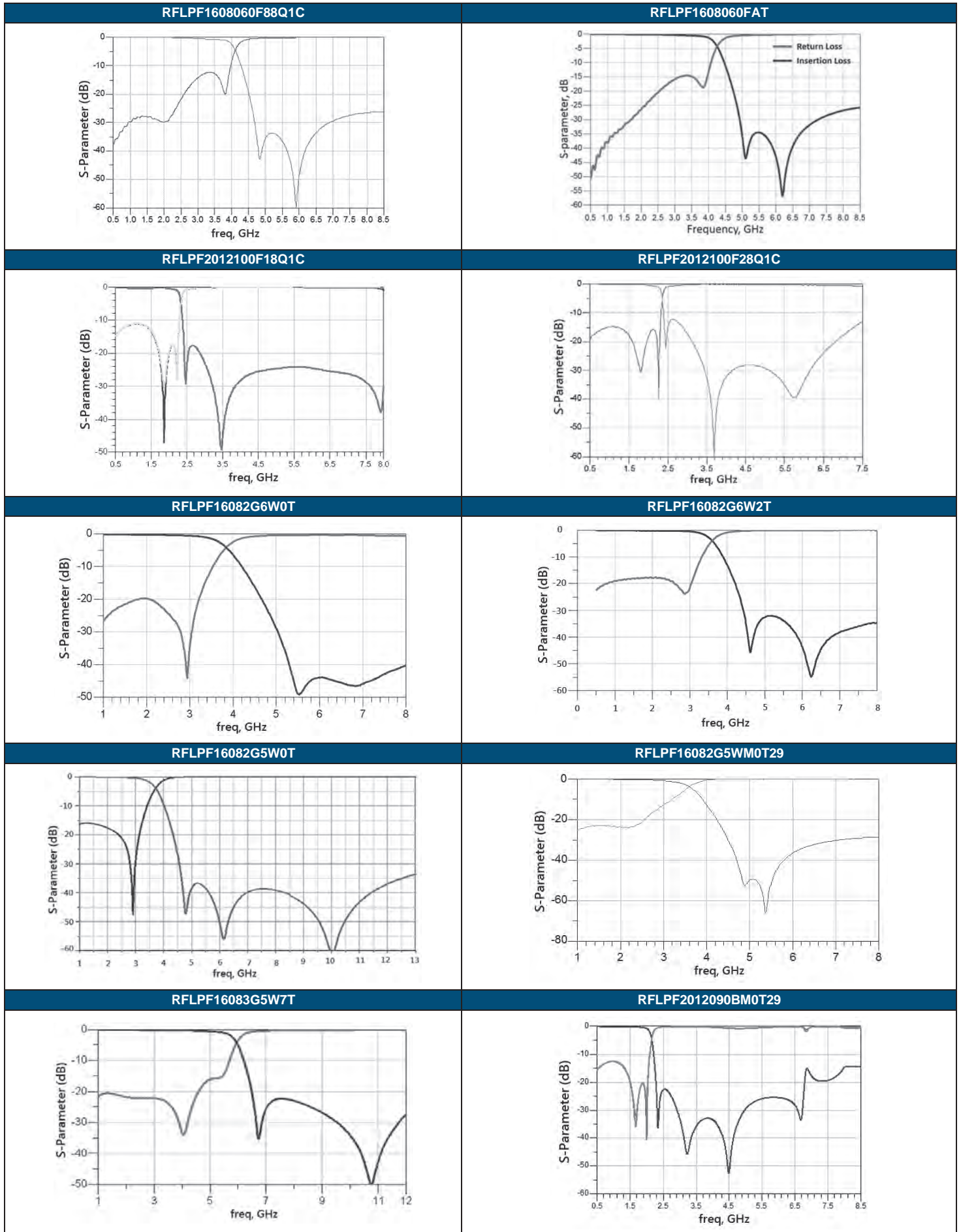
TYPICAL ELECTRICAL CHARACTERISTICS



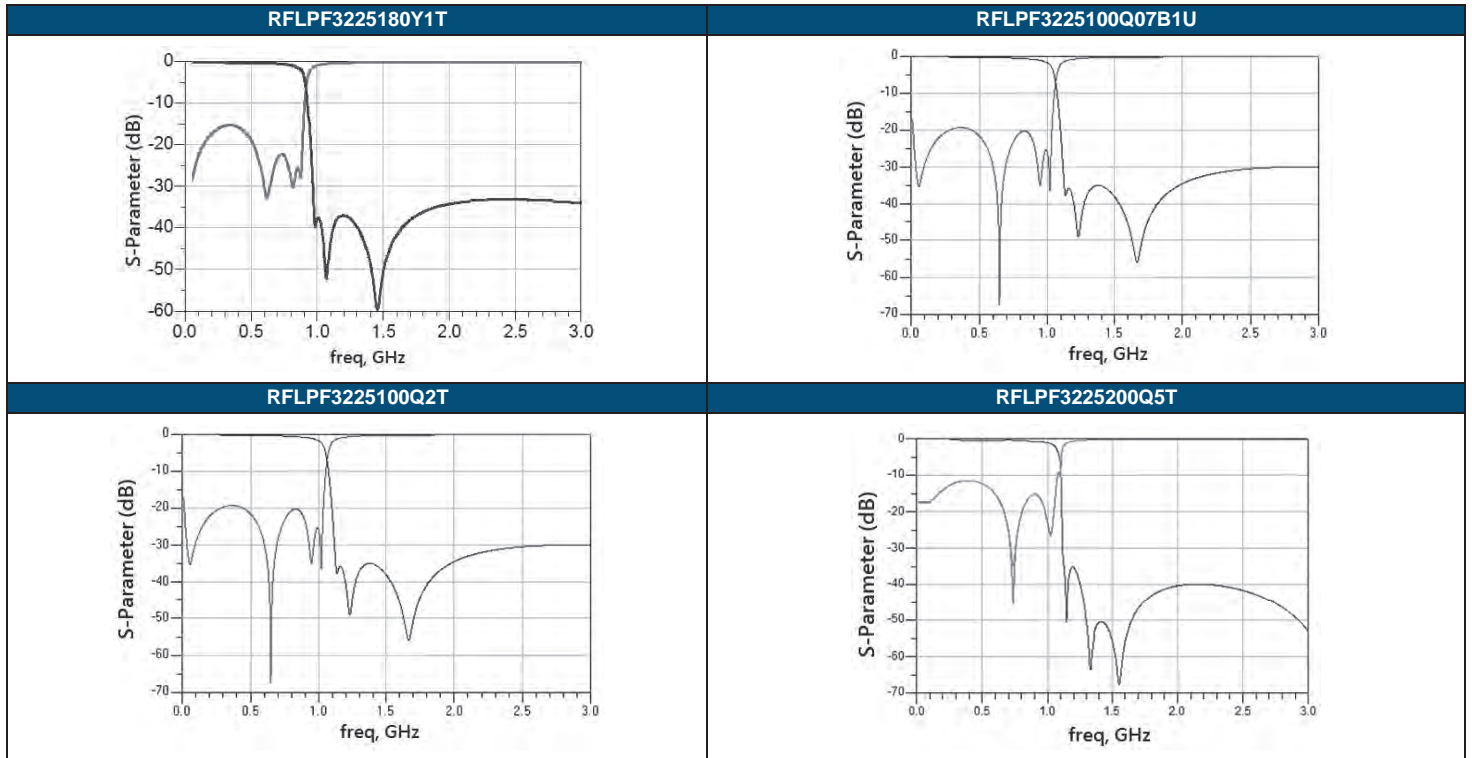
TYPICAL ELECTRICAL CHARACTERISTICS



TYPICAL ELECTRICAL CHARACTERISTICS



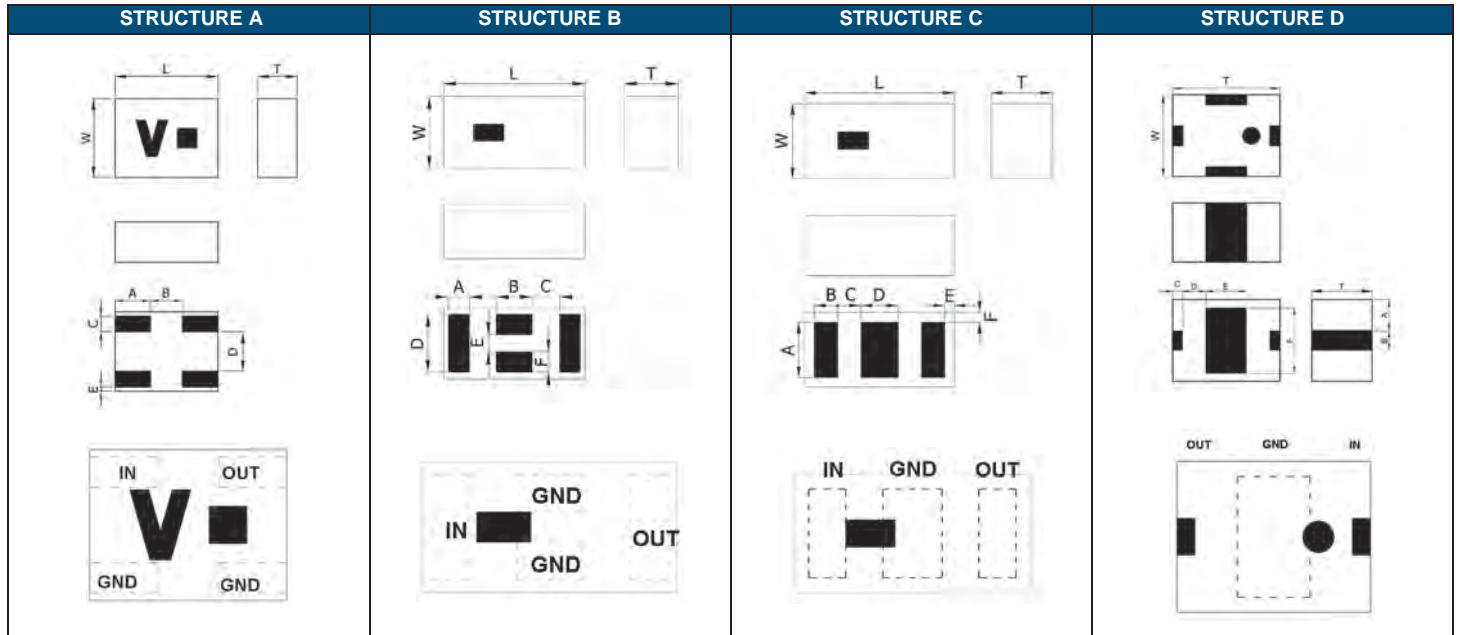
TYPICAL ELECTRICAL CHARACTERISTICS



- For more information, please contact with local sales representative
- All specifications are subject to change without notice

HIGH FREQUENCY MULTILAYER HIGH PASS FILTER

■ **STRUCTURE AND PIN ASSOCIATED**



■ **STRUCTURE AND DIMENSION**

Unit: mm

Structure/ Dimension	L	W	T	A	B	C	D	E	F
A	0.65 ± 0.10	0.50 ± 0.10	0.4 max.	0.225 ± 0.10	0.20 ± 0.05	0.10 ± 0.10	0.20 ± 0.05	0.05 ± 0.05	-
B	1.60 ± 0.15	0.80 ± 0.15	0.60 ± 0.1.0	0.23 ± 0.05	0.40 ± 0.10	0.30 ± 0.10	0.65 ± 0.10	0.20 ± 0.05	0.23 ± 0.05
C	1.60 ± 0.10	0.80 ± 0.10	0.65 max.	0.65 ± 0.10	0.25 ± 0.10	0.275 ± 0.10	0.40 ± 0.10	0.075 ± 0.05	0.075 ± 0.05
D	3.20 ± 0.20	2.50 ± 0.20	1.7 max.	0.95 ± 0.20	0.60 ± 0.20	0.30 ± 0.15	0.70 ± 0.15	1.20 ± 0.15	2.00 ± 0.15

■ **ELECTRICAL SPECIFICATION**

2496 ~ 2690 MHz BAND WORKING FREQUENCY

Part Number	Frequency Range (MHz)	Insertion Loss (dB)	Attenuation (dB min.)	VSWR (max.)	Size (mm)	Structure
RFHPPF16082G5W0T	2496-2690	1.2max.(25°C) 1.3max.(-40~+85°C)	25(1710-1995MHz)	2.0	1.6 X 0.8 X 0.6	B
RFHPPF16082G5W1T	2496-2690	0.9max.(25°C) 1.2max.(-40~+85°C)	22(1710-2010MHz)	2.0	1.6 X 0.8 X 0.6	C

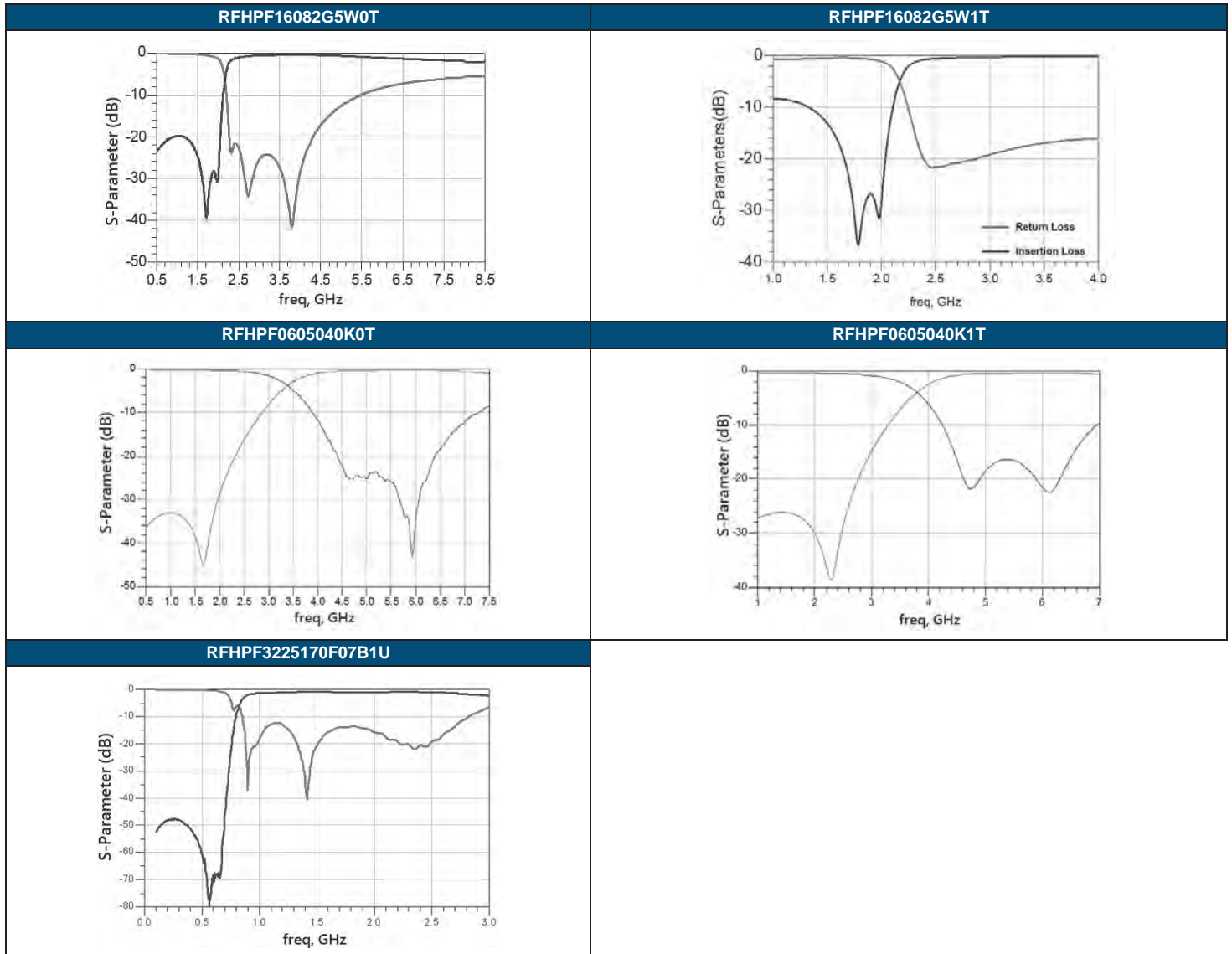
5GHz BAND WORKING FREQUENCY

Part Number	Frequency Range (MHz)	Insertion Loss (dB)	Attenuation (dB min.)	VSWR (max.)	Size (mm)	Structure
RFHPPF0605040K0T	4900-5840	0.60max.(25°C) 0.65max.(-40~+85°C)	14(2400-2500MHz)	1.6	0.65 X 0.5 X 0.4	A
RFHPPF0605040K1T	4900-5850	0.65	20(2450-2500MHz)	2.0	0.65 X 0.5 X 0.4	A

MoCA Application

Part Number	Frequency Range (MHz)	Insertion Loss (dB)	Attenuation (dB min.)	VSWR (max.)	Size (mm)	Structure
RFHPPF3225170F07B1U	950-2150	2.00max.(25°C) 2.2max.(-40~+85°C)	50(475-675MHz)	2.0	3.2 X 2.5 X 1.7	D

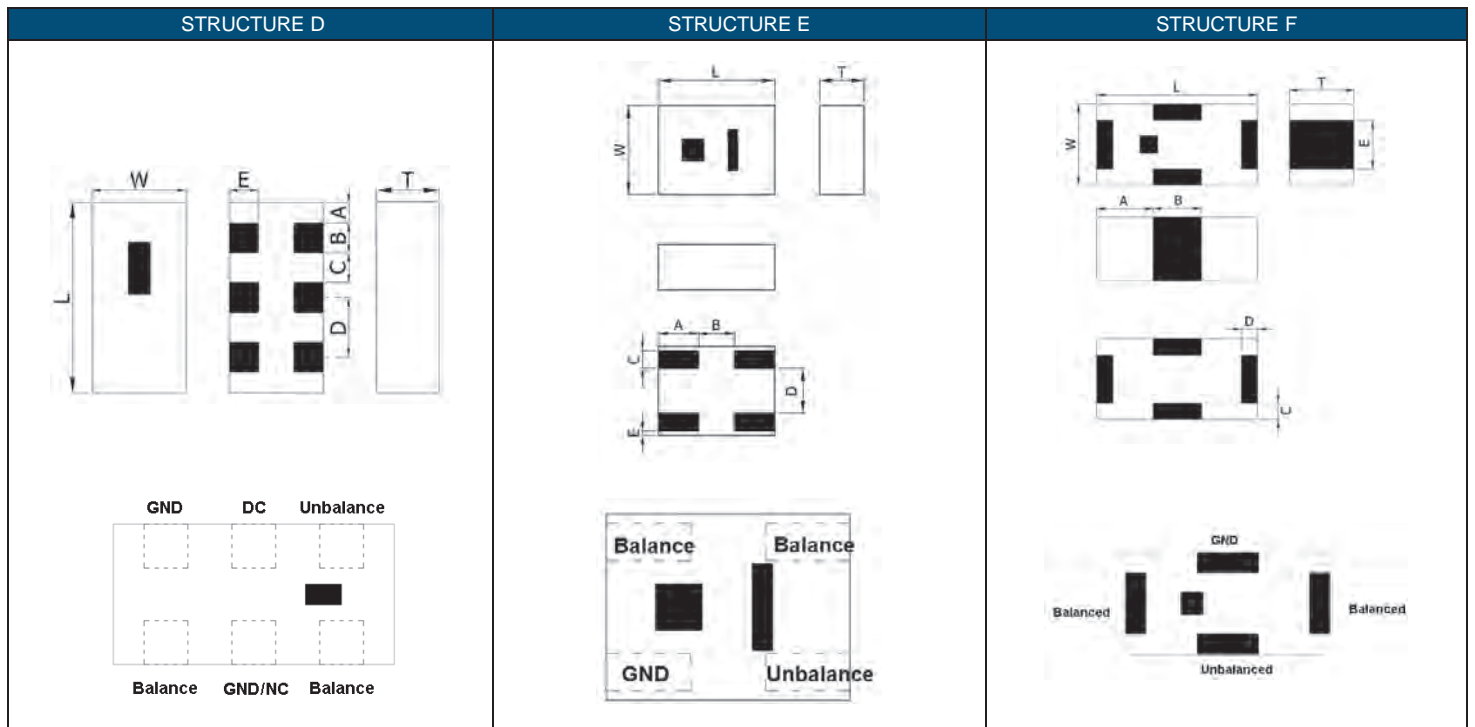
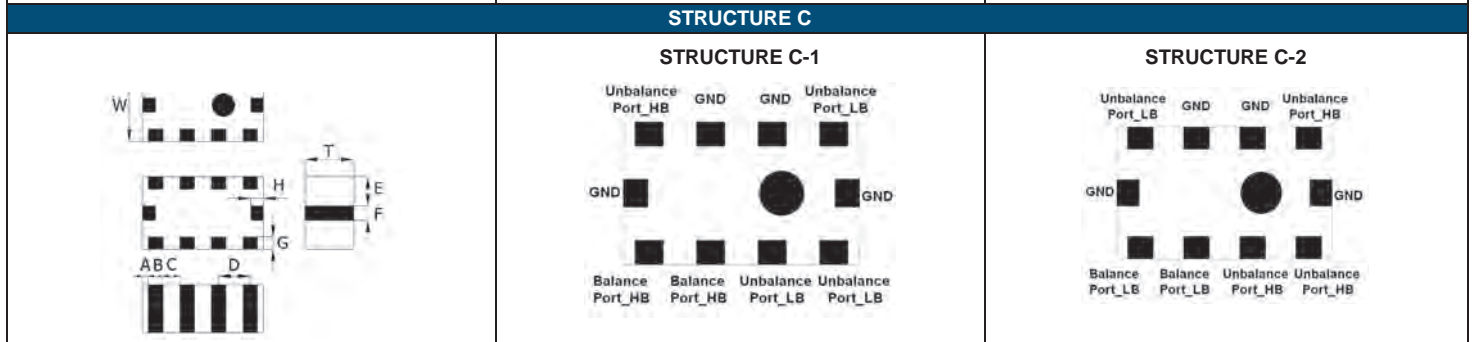
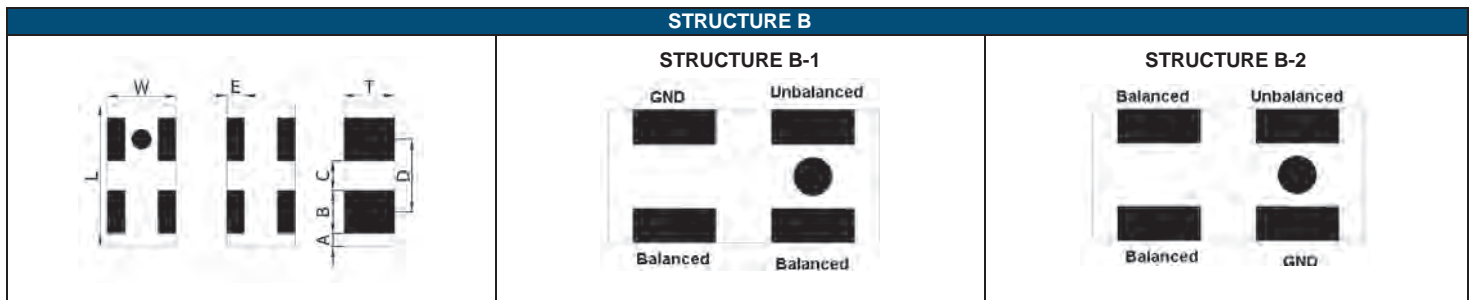
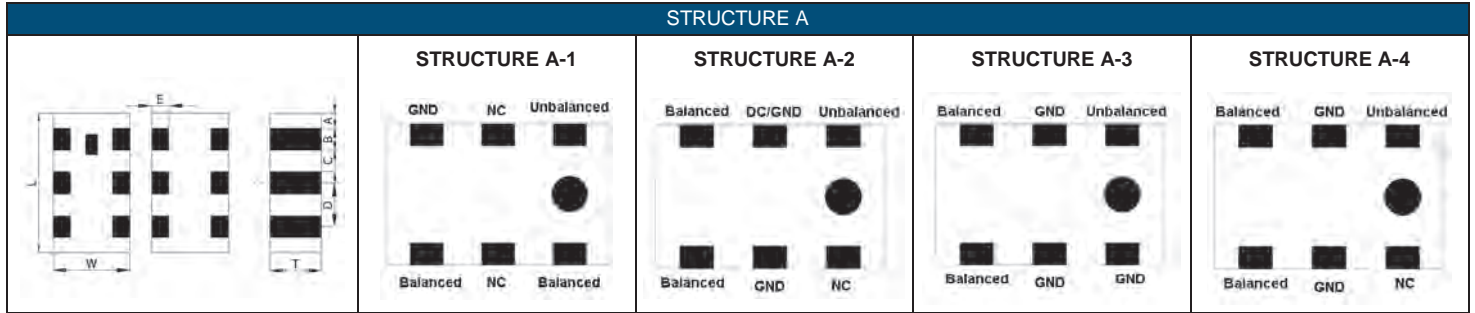
■ **TYPICAL ELECTRICAL CHARACTERISTICS**



- For more information, please contact with local sales representative
- All specifications are subject to change without notice

BALUN TRANSFORMERS

■ **STRUCTURE AND PIN ASSOCIATED**



■ **STRUCTURE AND DIMENSION**

Unit: mm

Structure/Dimension	L	W	T	A	B	C	D	E	F	G	H
A	1.60±0.10	0.85±0.10	0.70±0.10	0.20±0.10	0.20±0.10	0.30±0.10	0.50±0.05	0.50±0.05	-	-	-
	1.60±0.15	0.80±0.10	0.50±0.10	0.175±0.15	0.25±0.15	0.25±0.15	0.50±0.15	0.20±0.15	-	-	-
		0.85±0.10	0.40 max.	0.175±0.15	0.25±0.15	0.25±0.15	0.50±0.15	0.20±0.15	-	-	-
			0.60±0.10	0.175±0.15	0.25±0.15	0.25±0.15	0.50±0.15	0.20±0.15	-	-	-
		0.85±0.15	0.70±0.10	0.175±0.15	0.25±0.15	0.25±0.15	0.50±0.15	-	-	-	-
	0.65±0.10		-					-	-	-	
	2.00±0.15	1.25±0.15	0.80±0.10	0.20±0.20	0.30±0.20	0.35±0.20	0.65±0.20	-	-	-	-
			0.85±0.10	0.20±0.20	0.30±0.20	0.35±0.20	0.65±0.20	-	-	-	-
			0.80±0.10	0.20±0.15	0.30±0.20	0.35±0.20	0.65±0.20	-	-	-	-
			0.95±0.10	0.20±0.20	0.30±0.20	0.35±0.20	0.65±0.20	-	-	-	-
B	1.00±0.10	0.50±0.10	0.37±0.10	0.10±0.10	0.30±0.10	0.20±0.10	0.50±0.10	0.125±0.10	-	-	-
	1.00±0.10	0.50±0.10	0.40±0.10	0.10±0.10	0.30±0.10	0.20±0.10	0.50±0.10	0.125±0.10	-	-	-
C	2.00±0.10	1.25±0.15	0.90±0.10	0.125±0.10	0.25±0.10	0.25±0.10	0.50±0.10	0.475±0.10	0.30±0.10	0.20±0.15	0.20±0.15
D	1.60±0.15	0.80±0.15	0.50±0.10	0.175±0.10	0.25±0.10	0.25±0.10	0.50±0.10	0.25±0.10	-	-	-
E	0.65±0.10	0.50±0.10	0.40±0.10	0.20±0.05	0.20±0.05	0.025±0.025	0.10±0.05	0.25±0.05	0.025±0.025	-	-
F	1.00±0.10	0.50±0.10	0.5 max.	0.35±0.10	0.30±0.10	0.15±0.10	0.15±0.10	0.30±0.10	-	-	-

■ **ELECTRICAL SPECIFICATION**

ISM Band 2.4GHz APPLICATION

Part Number	Frequency Range (MHz)	Impedance(Ω)		Return Loss (dB) Min.	Insertion Loss (dB)	Amplitude Difference (dB) Max.	Phase Difference	Size(mm)	Structure
		Unbalance	Balance						
RFBLN1005040A6T	2400~2500	50	50	10	0.8	2.0	180± 10	1.00x0.50x0.40	B-2
RFBLN1608050AAT	2400~2500	50	Conjugate match to AR6003 chipset	10	1.2	2.0	180± 10	1.60x0.80x0.50	D
RFBLN1608050AM8T62	2400~2500	50	50	10	1.2	2.0	180± 10	1.60x0.80x0.50	A-2
RFBLN1608050AM0T63	2400~2500	50	50	10	1.0	1.0	180± 10	1.60x0.80x0.55	A-2
RFBLN1608050AM6T30	2400~2500	50	35	10	1.0	1.0	180± 10	1.60x0.80x0.55	A-2
RFBLN1608060AC6T40	2400~2500	50	Conjugate match to TI CC26XX Chipset	10	1.6(25°C) 1.8(-40~+85°C)	2.3	180± 18	1.60x0.80x0.60	A-3
RGBLN1608070A1T	2400~2500	50	100	10	1.5	2.0	180± 15	1.60x0.85x0.70	A-1
RGBLN1608070A5T	2400~2500	50	100	10	1.2	2.0	180± 10	1.60x0.80x0.70	A-2
RGBLN2012080A5T	2400~2500	50	50	12	1.0	1.0	180± 10	2.00x1.25x0.85	A-2
RFBLN2012080A7T	2400~2500	50	100	10	1.0	2.0	180± 10	2.00x1.25x0.80	A-2
RGBLN2012090A0T	2400~2500	50	50	10	1.2	2.0	180± 10	2.00x1.25x0.95	A-2
RFBLN2012090A1T	2400~2500	50	100	10	1.0	2.0	180± 10	2.00x1.25x0.95	A-2

ISM Band 5GHz APPLICATION

Part Number	Frequency Range (MHz)	Impedance(Ω)		Return Loss (dB) Min	Insertion Loss (dB)	Amplitude Difference (dB) Max.	Phase Difference	Size (mm)	Structure
		Unbalance	Balance						
RFBLN1005040K1T	4900~5950	50	50	10	1.2	2.0	180± 10	1.00x0.50x0.40	B-2
RFBLN1005040K5T	4900~5950	50	100	10	0.55(25°C) 0.75(-40~+85°C)	2.5	180± 10	1.00x0.50x0.40	B-2
RFBLN1005040K6T	4900~5950	50	50	10	0.60(25°C) 0.80(-40~+85°C)	2.5	180± 15	1.00x0.50x0.40	B-2
RFBLN2012090K1T	4900~5900	50	100	10	1.2	2.0	180± 10	2.00x1.25x0.95	A-4

LTE Band APPLICATION

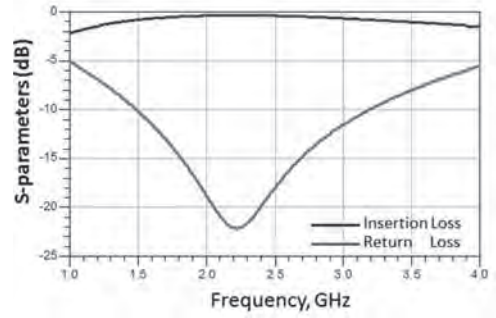
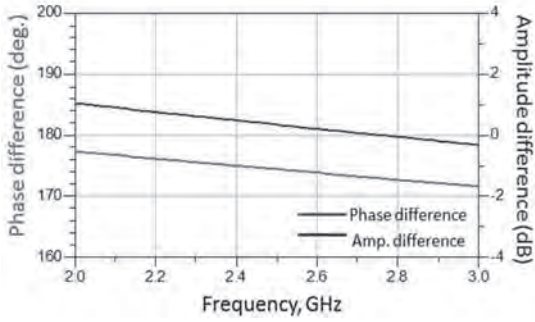
Part Number	Frequency Range (MHz)	Impedance(Ω)		Return Loss (dB)Min	Insertion Loss (dB)	Amplitude Difference (dB) Max.	Phase Difference	Size (mm)	Structure
		Unbalance	Balance						
RFBLN0605040Y1T	717-821	50	100	15	0.55(25°C) 0.65(-40~+85°C)	2.0	180± 10	0.65x0.50x0.40	E
RFBLN0605040YM9T16	729-821	50	100	10	0.55(25°C) 0.65(-40~+85°C)	2.0	180± 10	0.65x0.50x0.40	E
RFBLN1005040YM1T69	703-803	50	100	10	0.8	2.0	180± 12	1.00x0.50x0.40	F
RFBLN06050G9D0T	729-960	50	100	15	0.85(25°C) 0.95(-40~+85°C)	4.8	180± 10	0.65x0.50x0.40	E
RFBLN16080G9D2T	699-960	50	100	10	1.05(25°C) 1.15(-40~+85°C)	2.5	180± 15	1.60x0.80x0.70	A-4
RFBLN16080G9D3T	824-894	50	50	10	1.2	1.0	180± 10	1.60x0.80x0.60	A-2
RFBLN20120G9D0T	824-894	50	100	10	1.2	1.0	180± 10	2.00x1.25x0.90	A-2
RFBLN20120G9D5T	880-960	50	100	10	1.1	1.0	180± 10	2.00x1.25x0.90	A-2
RFBLN20120G9D8T	800-1000	50	50	10	1.2	2.0	180± 10	2.00x1.25x0.90	A-2
RFBLN06051G8DM1T69	1805-1990	50	100	10	0.60(25°C) 0.65(-40~+85°C)	1.8	180± 10	0.65x0.50x0.40	E
RFBLN06051G8D1T	1805-2170	50	100	10	0.65(25°C) 0.70(-40~+85°C)	3.0	180± 15	0.65x0.50x0.40	E
RFBLN20121G8D1T	1700-2000	50	100	10	1.0	2.0	180± 10	2.00x1.25x0.95	A-2
RFBLN10051G9D0T	1805-2020	50	100	10	0.65(25°C) 0.75(-40~+85°C)	2.0	180± 10	1.00x0.50x0.40	B-2
RFBLN10051G9D1T	1805-1990	50	100	10	0.60(25°C) 0.70(-40~+85°C)	2.2	180± 12	1.00x0.50x0.40	B-2
RFBLN1005040F0T	1805-2170	50	100	10	0.70(25°C) 0.80(-40~+85°C)	1.2	180± 15	1.00x0.50x0.40	F
RFBLN1608070F48Q1C	673-2700	50	100	10	1.7(25°C) 2.0(-40~+85°C)	1.5	180± 17	1.60x0.80x0.70	A-4
RFBLN1608060FET	1710-2200	50	50	10	1.20(25°C) 1.40(-40~+85°C)	2.0	180± 10	1.60x0.80x0.60	A-2
RFBLN2012090F0T	1920-1980 2110-2170	50	50	10	1.0	2.0	180± 10	2.00x1.25x0.95	A-2
RFBLN0605040E0T	2000-2500	50	100	10	0.60(25°C) 0.70(-40~+85°C)	3.5	180± 10	0.65x0.50x0.40	E
RFBLN2012090E0T	1500-3000	50	100	10	1.0	2.0	180± 10	2.00x1.25x0.90	A-4
RFBLN06052G5W9T16	2300-2690	50	100	10	0.55(25°C) 0.65(-40~+85°C)	2.5	180± 10	0.65x0.50x0.40	E
RFBLN10052G5W9T16	2300-2690	50	100	10	0.55(25°C) 0.65(-40~+85°C)	2.5	180± 10	1.00x0.50x0.40	B-1
RFBLN10052G5W37N2T	2300-2690	50	100	10	0.65(25°C) 0.75(-40~+85°C)	2.5	180± 10	1.00x0.50x0.40	B-2
RFBLN16082G5W0T	2300-2700	50	100	10	1.1	2.0	180± 10	1.60x0.80x0.70	A-2
RFBLN16082G5W38Q1C	2300-2700	50	100	10	0.55(25°C) 0.65(-40~+85°C)	1.0	180± 10	1.60x0.80x0.40	A-4
RFBLN16082G5W4T	2300-2700	50	50	10	1.2	2.0	180± 10	1.60x0.80x0.50	A-2

GSM 850/ GSM 900/ DCS1800/ PCS1900 APPLICATION

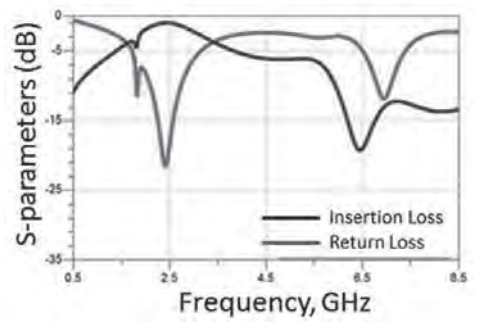
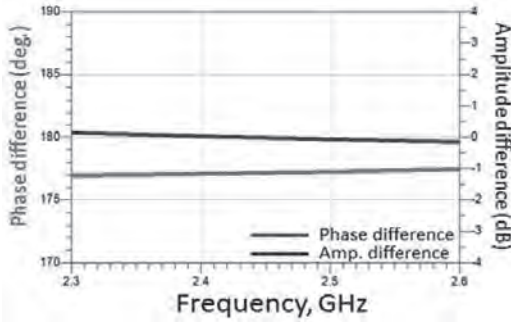
Part Number	Frequency Range (MHz)	Unbalance	Balance	Return Loss (dB) Min	Insertion Loss (dB)	Amplitude Difference (dB) Max	Attenuation (dB min.)	Phase Difference	Size(mm)	Structure
RFBLN2012090BM5T25	869-960	50	200	10	1.1	2.0	10(1738-1920MHz) 20(2400-2500MHz) 20(2607-2880MHz)	180± 10	2.00x1.25x0.95	C-1
	1805-2025	50	200	10	1.8	2.0	15(2400-2500MHz) 20(3610-3980MHz) 20(5415-5970MHz)	180± 15		
RFBLN2012090BS0T53	869-960	50	200	10	1.1(25°C) 1.3(-40~+85°C)	2.0	10(1738-1920MHz) 20(2400-2500MHz) 20(2607-2880MHz)	180± 15	2.00x1.25x0.95	C-1
	1805-1990	50	200	10	1.6(25°C) 1.8(-40~+85°C)	2.0	15(2400-2500MHz) 15(3610-3980MHz) 20(5415-5970MHz)	180± 15		
RFBLN2012090BS0T50	869-960	50	200	10	1.1(25°C) 1.3(-40~+85°C)	2.0	10(1738-1920MHz) 20(2400-2500MHz) 20(2607-2880MHz)	180± 15	2.00x1.25x0.95	C-2
	1805-2025	50	200	10	1.8(25°C) 2.0(-40~+85°C)	2.0	15(2400-2500MHz) 15(3610-3980MHz) 20(5415-5970MHz)	180± 15		

■ **TYPICAL ELECTRICAL CHARACTERISTICS**

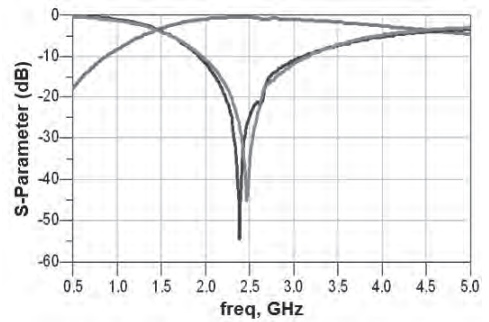
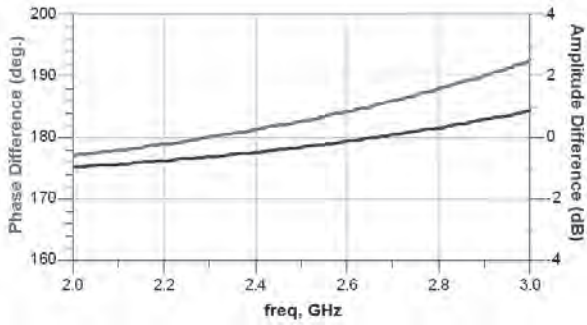
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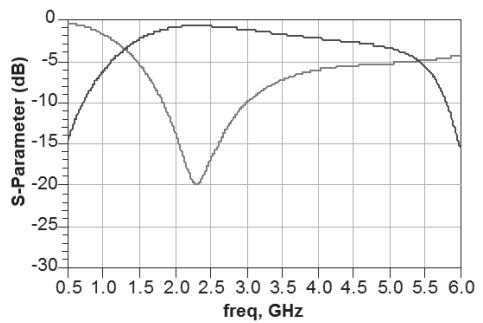
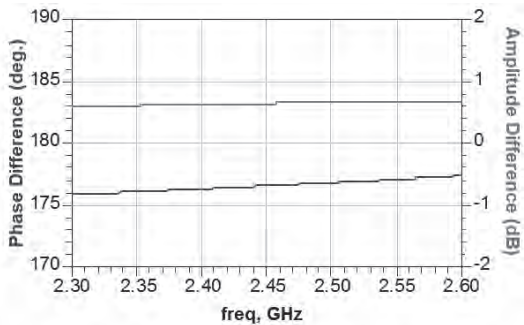
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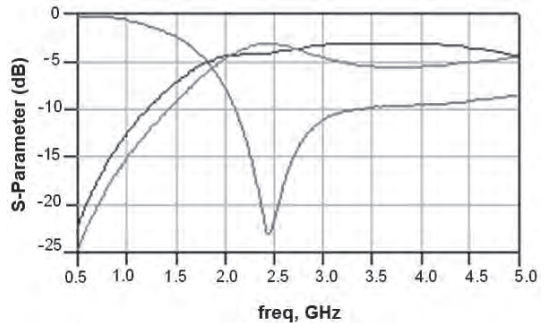
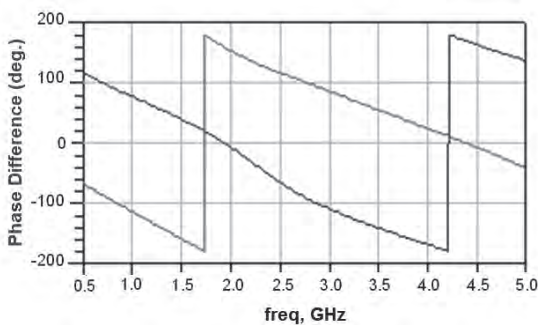
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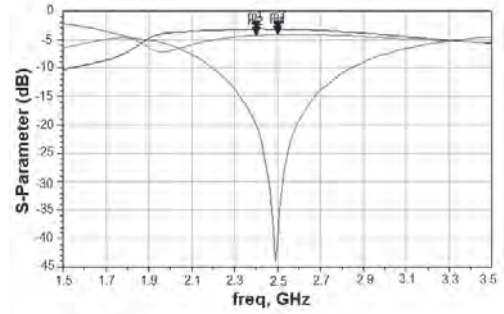
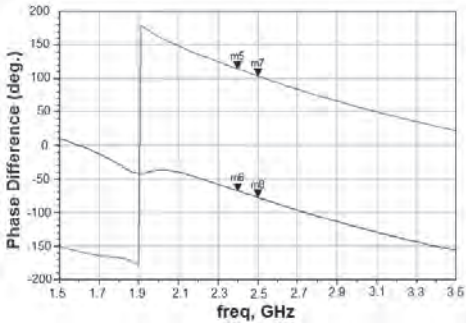


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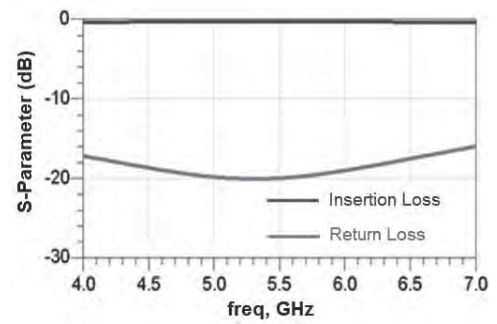
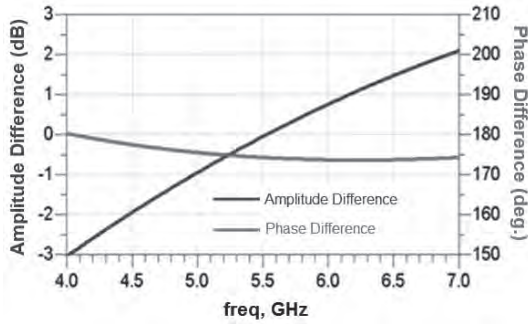


TYPICAL ELECTRICAL CHARACTERISTICS

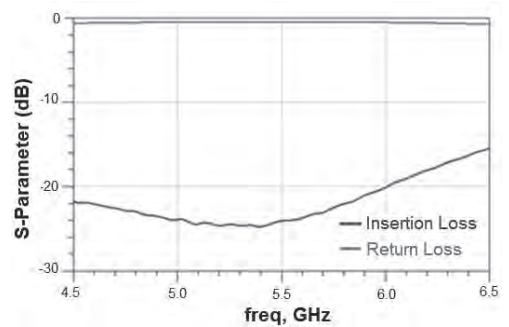
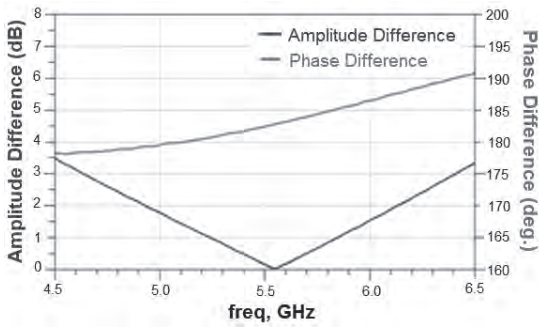
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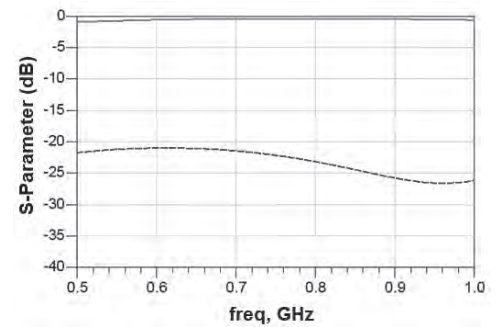
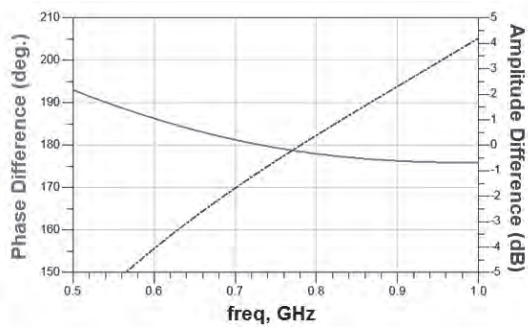
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