

**INSTRUMENT SPECIALTIES CO., INC. – WORLD COMPLIANCE CENTER
EMC MEASUREMENT/TECHNICAL REPORT**

FCC PART 15 Certification Submittal and Grant of Equipment Authorization Submittal For: Martec Access Products, Inc. FCC ID Number: KJ802-3039	<i>Document No.</i>	<i>Revision</i>	<i>Issue Date</i>
	112384-A-FCC	0	1 May 2000

EXHIBIT 9 – Parts List

3 pages - Bill of Materials

BILL OF MATERIALS FOR P/N: 02-3039 PCBA

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REV F0.D

BILL OF MATERIALS FOR P/N: 02-3039 PCB-A				KWT	(WIRELESS KESYPAD)	VOLUME: 1	
Page 1 of 3	REV F0.D			12/2/99			
Component							
P/N	Part Description	Manufacture	Mfg P/N/N	CIRCUIT REFERENCE	Q-ty		
11-10??	RES 47 OHM 1/8W 5% CF	Hong Kong Resistor			R32	1	
11-1160.E	RES 330 OHM 1/8W 5% CF	Hong Kong Resistor			R19	1	
11-1180.E	RES 470 OHM 1/8W 5% CF	Hong Kong Resistor			R22	1	
11-1249	RES 1.0K 1/8W 5% CF	Hong Kong Resistor			R1,R2,R3,R4,R9,R10	10	
11-1280.E	RES 2.2K 1/8W 5% CF	Hong Kong Resistor			R11,R13,R24,R25	2	
11-1330.E	RES 4.7K 1/8W 5% CF	Hong Kong Resistor			R1,R21	4	
11-13??	RES 6.8K 1/8W 5% CF	Hong Kong Resistor			R14,R15,R18,R23	1	
11-1400.E	RES 10K 1/8W 5% CF	Hong Kong Resistor			R17	8	
11-1420.E	RES 15K 1/8W 5% CF	Hong Kong Resistor			R5,R6,R7,R8,R26	1	
11-1510.E	RES 47K 1/8W 5% CF	Hong Kong Resistor			R27,R28,R30	1	
11-1880.E	RES 1M 1/8W 5% CF	Hong Kong Resistor			R31	3	
12-0022	CAP 3.3pF 100V P100 +120/-40PPM 0.1LS	PHILIPS	R339C13M7JHWCAP		R33	1	
THE VALE OF ABOVE CAPACITOR CAN BE CHANGE FOR THE TUNING PURPOSE TO FIT IN TO THE TUNING TOLERANCE					C7	1	
12-0022	CAP 3.3pF 100V P100 +120/-40PPM 0.1LS	PHILIPS	R339C13M7JHWCAP		C4	1	
12-0034,N750	CAP 12pF 100V N750 +/- 120PPM 0.1LS	PHILIPS	R120G13U2JHWCAP		C5	1	
12-1005	CAP 6.8pF 100V NPO +/- 30PPM 0.1LS	PHILIPS	R689C13COGHWCAP		C8	1	
Alternate	CER CAP 6.8PF 50V +/-5% NPO 0.1"LS	CENTRALAB	D689D20COHF52L2A				
12-1289	CAP 0.01uF 100V +80/-20 Z5U 0.2"LS	AVX	SR211E103ZAA		C3,C11,C13	3	
Alternate	CAP 0.01uF 50V +80/-20 Z5U 0.2"LS	Centrolab	D223M39Z5UF2H5				
Alternate	CAP 0.01uF 50V +80/-20 Z5U 0.2"LS	THOMPSON	ECO4WEO103ZHB				
12-1390	CAP 0.1uF 50V Z5U +80%-20% RAD 2LS	PANASONIC	ECF-F1H104ZF5		C12	1	
Alternate	CAP 0.1uF 200V Z5U +80%-20% RAD 2LS	MURATA	RPE113 Z5U 104 Z 200V				
Alternate	CAP 0.1uF 100V Z5U +80%-20% RAD 2LS	MURATA	RPE123 Z5U 104 Z 100V				
Alternate	CAP 0.1uF 50V Z5U +80%-20% RAD 2LS	MURATA	RPE122 Z5U 104 Z 050V				
Alternate	CAP 0.1uF 100V Z5U +80%-20% RAD 2LS	MURATA	RPE122 Z5U 104 Z 100V				
Alternate	CAP 0.1uF 50V X7R +20% RAD 2LS	MURATA	RPE122 X7R 104 M 050V				
Alternate	CAP 0.1uF 100V X7R +20% RAD 2LS	AVX	SR215E104Z				
Alternate	CAP 0.1uF 50V Z5U +80%-20% RAD 2LS	AVX	SR211E104Z				
Alternate	CAP 0.1uF 100V Z5U +80%-20% RAD 2LS	AVX	SR215C104M				
Alternate	CAP 0.1uF 50V X7R +20% RAD 2LS	AVX	SR211C104M				
Alternate	MONO CAP 0.1UF 50V 20% Z5U 0.2"LS	CENTRALAB	K104MI5Z5UF53H5				
12-3131	CAP TRIM. (RF) 1.25-2.3pF 0/+30%	MURATA	TZ03Z2R3ER169		C6	1	
12-4020	CAP. 1.0uF 50V 50/10% RAD	MATSUSHITA	ECE-A1HU010		C10	1	
Alternate	CAP. 1.0uF 50V 50/10% RAD	ELGEN	RE50V1uF				
12-4112	CAP. 10uF 16V +80%/-20% RAD	MATSUSHITA	ECE-AICGE100		C9	1	
Alternate	CAP. 10uF 35V +80%/-20% RAD	ELGEN	RE35V10uF				
13-1110	INDUCTOR, 1uH AXIAL	J.W.MILLER	78F1R0K		L1	1	
Alternate	INDUCTOR, 1uH AXIAL	FORDIC	EC24-1R0K				

BILL OF MATERIALS FOR P/N: 07-3039 PCBA

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REV F0.D

KWT

(WIRELESS KEYPAD)

VOLUME: 1

Q-ty

P/N	Part Description	Manufacture	12/2/99 file: 3039F0D.XLS	Mfg P/N/N	CIRCUIT REFERENCE	Q-ty
16-1824.P	RESON. 12.0MHz 0.5%(3PIN)	PANASONIC	EFO-GC1205C4		Y1	1
Alternate	RESON. 12.0MHz 0.5%(3PIN)	MURATA	CSI 12MHz MTW			
Alternate	RESON. 12.0MHz 0.5%(3PIN)	CQ	ZTT12.00MT			
21-1010	DIODE IN4148 SILICON DO-35	Fukucm	IN4148		D6	1
Alternate	DIODE IN4148 SILICON DO-35	National Semiconductor	IN4148		D6	1
21-4050	ZENER 5.1V 1/2W IN5231B	RIVER	IN5231B		D3	1
21-6114	LED 3mm (T1) GREEN DIFFUSED	ROHM			D1	1
Alternate	LED 3mm (T1) GREEN DIFFUSED	Everlight	EL 304GD			
21-6115	LED 3mm (T1) YELLOW DIFFUSED	ROHM			D2	1
Alternate	LED 3mm (T1) YELLOW DIFFUSED	Everlight	EL 304YD			
21-6116.K	LED 3mm (T1) RED (CLEAR)	Kingbright	L-964SRC		D4.D5	2
22-1039	TRANSISTOR NPN 2N3904, TO92	Motorola	2N3904		Q2.Q3.Q5	3
Alternate	TRANSISTOR NPN 2N3904, TO92	Fukucm	2N3904			
Alternate	TRANSISTOR NPN 2N3904, TO92	Samsung	2N3904			
Alternate	TRANSISTOR NPN 2N3904, TO92	National Semiconductor	2N3904			
22-1040	TRANSISTOR PNP 2N3906, TO92	Motorola	2N3906		Q4	1
Alternate	TRANSISTOR PNP 2N3906, TO92	Fukucm	2N3906			
Alternate	TRANSISTOR PNP 2N3906, TO92	Samsung	2N3906			
Alternate	TRANSISTOR PNP 2N3906, TO92	National Semiconductor	2N3906			
22-1164	NPN MPSH10, (RF) TO92	MOTOROLA	MPSH10		Q1	1
23-6106.OTP	uC Z86E08 OTP 18PDIP 2K 12MHz	ZILOG	Z86E0812PSC		U1	1
23-6107.018	uC Z86E08 Masked(KWT) 18PDIP 2K 12MHz	ZILOG	Z86E0812PSC		U1	1
23-7029.MI	EEPROM 1K BIT IIC IT 8PDIP 5.0V	MICROCHIP	24C01BI/P		U2	1
23-7029.MI3	EEPROM 1K BIT IIC IT 8PDIP 2.7V	MICROCHIP	24LC01BI/P		Alternate to above	
33-9501	BATTERY SNAP T TYPE 6" 9V				BATT SNAP	1
38-3039	PCB, KWT (WIRELESS KEYPAD) REV F		PCB ver F			1
53-0377	LED HOLDER	RDL				1
	KEYPAD CLEAR 3x4	RDL	ABD-107 Rev C			1
	MOLD MATERIALS: HOUSING	RDL	ABD-87		ON RESET	1
	MOLD MATERIALS: FRONT COVER	RDL	ABD-30 COLOR BLACK			1
	MOLD MATERIALS: BACK PLATE	RDL	ABD-32 COLOR BLACK			1
	MOLD MATERIALS: BATTERY COVER	RDL	ABD-31 COLOR BLACK			1
	SCREW	RDL	ABD-34 COLOR BLACK			1
MK-9301	9V BATTERY No 216 Classic	EVEREADY	T3.5 x 38 RH			2
Alternate	9V BATTERY type E6F22M Extra Heavy Duty	Hi-Watt Battery Ind. Co., LTD				1
Alternate	9V BATTERY type E6F22MX Super Heavy Duty	Hi-Watt Battery Ind. Co., LTD				
	LED's MOUNTING DRAWING					
	GASKET FOR ABD-32	RDL	ABD-108 REV A			1
	FCC LABEL (COATED PAPER)	RDL	MDN120A.VSD			1
	BUBBLE BUG					
ABD-116	0.5" DIAMETER LABEL WITH PERMANENT ADHESIVE		ABD-116 REV A			1
	TO COVER THE TUNING HOLE ON THE BOTTOM SIDE OF THE PLASTIC CASE					

