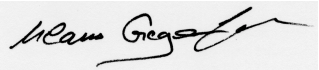


Radiation-Test

accdg. FCC Part 15

Typ: 12BBB Testdistance: 3 m
 Manufacturer: Toyota Motor Corporation Testreceiver: ESVP / FSEM
 Client: Toyota Motor Corporation Antenna: BBA/ UHALP/ Model 3115
 Regulation: FCC Part 15 Testengineer: KG
 Order No.: T18173-1-12KG Date 28.-10-2000
 Operation Tx
 Mode:
 Remarks: The limits are kept.

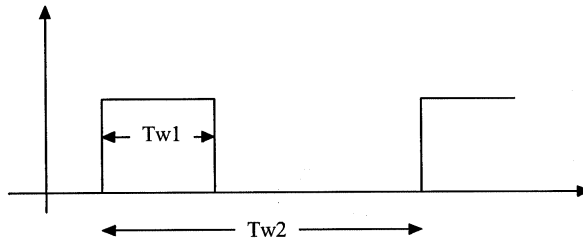


Result	Frequency [MHz]	Reading PK [dBuV/m]	Korr [dB]	Duty Cycle [dB]	Final [dBuV/m]	Limit [dBuV/m]	DLimit [dBuV/m]	Polarisation
	314.0	35.7	20.7	-6.0	50.4	75.5	25.1	Ver
	314.0	55.0	20.7	-6.0	69.7	75.5	5.8	Hor
	628.0	--	30.7	-6.0	--	55.5	--	
	942.0	--	33.3	-6.0	--	55.5	--	
	1253	50.5	-15.5	-6.0	29.0	54.0	25.0	Hor
	1577	60.3	-15.0	-6.0	39.3	54.0	14.7	Hor
	1890	51.4	-12.8	-6.0	32.6	55.5	22.9	Hor
	2205	53.0	-11.2	-6.0	35.8	54.0	18.2	Hor



Duty cycle:

Data type:



Frame Format:

Header (8bit)	Parity bit (8bit)	Function bit (16bit)	ID and Counter bit (64bit)
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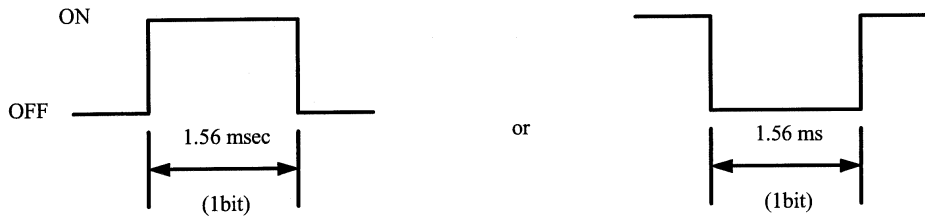
Data time:

	Tw1/Tw2	
Header	0.78 msec/0.78 msec	
Parity bit	Data "0"	0.78 msec/0.78 msec
Function bit	Data "1"	0 msec/1.56 msec or 1.56 msec/0 msec *
ID and Counter bit		

* Data "1"

Pattern A

Pattern B



Calculation of the duty factor:

- Header = $0.78 \text{ msec} / 0.78 \text{ msec} \times 8 \text{ bit} = 0.5$

- Parity bit, function bit, ID and Counter bit

When Data is "0";

$0.78 \text{ msec} / 0.78 \text{ msec} \times 88 \text{ bit} = 0.5$

When Data is "1";

Because Pattern A and Pattern B are transmitted one after the other because Data "0" has one cycle, 0.78 ms high and 0.78 ms low, but Data "1" has half cycle, 0ms high/1.56 ms low on 1.56 ms high/0 ms low,

$(1.56 \text{ msec} / 2) / (1.56 \text{ msec} / 2) \times 88 \text{ bit} = 0.5$

Therefore

Duty Factor = $20 \log 0.5 = -6.0$