

MT-2040/E/D

20-500 MHz DF Blade Antenna



Wireless Edge
Antenna Solutions
An MTI Company

Electrical

Frequency	20-500 MHz							
Gain								
Frequency (MHz)	20	30	60	90	140	220	400	500
Minimum Gain (dBi)	-42	-27	-19	-12	-2	3	1.5	1
VSWR	3.5:1 @ 20 – 30 MHz 3.0:1 @ 30 – 100 MHz 2.6:1 @ 100 – 500 MHz							
Azimuth Pattern	Omni Directional							
Polarization	Vertical							
Elevation BW	30° - 130° typ							
Phase Matching (measured on 1x2 m ground plane)	± 3° for 30 – 150 MHz ±4° for 150 – 500 MHz							
Input Power	5 W CW							
Input Impedance	50 Ω							
Lightning Protection	DC Grounded							

Mechanical

Dimensions (LxWxD)	363.2 x 324.5 x 120.9 mm max
Weight	1.8 kg max
Connector	TNC-Type female
Radome	Fiberglass
Base Plate	Aluminum with chemical conversion coating
Paint	Polyurethane Per MIL-C - 83286 GRAY 36375 Per FED-STD-595

Environmental

Test	Standard	Duration	Temperature	Notes
Low Temperature	MIL-STD-810E Method 502.2 Proc.I&II	24 h	-54°C	
High Temperature	MIL-STD-810E Method 502.2 Proc.I&II	96 h	+85°C	
Temperature Altitude	RTCA/DO 160E Section 4	14 h		40,000 ft
Random Vibration	RTCA/DO 160E Section 8	3x1hours/a xis		5.85 g rms
Mechanical Shock	RTCA/DO 160E Section 7	11 msec		6 gr
Crash Safety	RTCA/DO 160E Section 7	11 msec		20 gr
Solar Radiation	MIL-STD-810E Method 505.3 TABLE 505.3-1			
Sand	RTCA/DO 160E Section 12	3 h		
Salt Spray	MIL-STD-810E Method 509.3 Procedure I	96 h		
Side Pressure - Static Load				381 Kg
Humidity	MIL-STD-810E Method 507.3 Proc I 98% R.H. @ 45°	240 h		98% 10 cycles of 24 hr
Acceleration	MIL-STD-810E Method 513.4 Proc I			13G All axis

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