

# MT-809520/S

6 – 18 GHz Constant Beam width Horn

## Electrical

Frequency	6 – 18 GHz
Peak Gain	9 dBi min
VSWR typ	2.5 : 1 max , 90% of band. 3.5 : 1 max , 100% of band.
Polarization	45° slant
Gain at ±15° azimuth	6.0 dBi
Second cross over @ ±30° *	12 ± 3 dB below peak
3 dB Azimuth Beam width	30° ± 2°, 90% of band. 30° ± 3°, 100% of band.
3 dB Elevation Beam width	≥30°@ a min. gain of 8 dBi
Peak gain tracking	2 dB
Monopoles gain tracking *	monopulse gain tracking of all the element pairs does not deviate by more than 2 dB from the mean curve between the second cross over points.
Input Impedance	50 Ω
Power handling	10 W CW

## Mechanical

Dimensions LxWxH	184 x 133 x 70 mm max
Connector	SMA Female
Weight	450 gr max
Color	Polyurethane Gray 26373 Per FED – STD - 595

## Environmental

Storage life	-20°C to + 71° C with 95% RH
High Temperature	+85° C
Low Temperature	-54° C
Altitude	Per MIL – STD – 810D, Method 504.1. Proc. I Category 7 up to 40,000 ft.
Thermal Shock, Operation	Per MIL – STD – 810D, Method 503.2, Paragraph 3.2.5.4. -54°C to +85°C
Thermal Shock, Non - Operation	Per MIL – STD – 810D, Method 503.2, Paragraph 3.2.5.4. -62°C to +85°C
Humidity	Per MIL – STD – 810D, Method 507.2, Proc. I “Constant High Humidity”
Salt Fog	Per MIL – STD – 810D, Method 509.2, Proc. I
Fungus	Per MIL – STD – 810D, Method 508.3
Vibration	Per MIL – STD – 810D, Method 514.3, Proc. I, Category 4, paragraph 3.2.5.9. Li = 1.26g <sup>2</sup> /Hz, F1, F2=2*F1, F3=3*F1, F4=4*F1
Shock,	Per MIL – STD – 810D, Method 516.3, Procedure I & V.
Acceleration, Structural	Per MIL – STD – 810F Method 513.5 Procedure I, values per table 513.5-I
Acceleration, crash safety	Per MIL – STD – 810F Method 513.5 Procedure III, values per table 513.5-III
Explosive Atmosphere	Per MIL – STD – 810D, Method 511.2, Proc. I

\* Applicable only in circular array of horn.

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