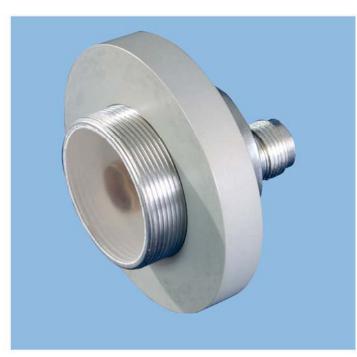
Smiths microwave



Telemetry, MDI and Tracking Beacon Antennas



- Adjustable Mounting Flange
- Heat Resistant, Survives 3000°F
- Environmentally Qualified
- Flush Mounted for Zero Drag
- Rugged Construction, Quartz Aperture, S.S. Body
- Small and Lightweight

This family of high temperature, flush-mountable antennas are circularly polarized and designed to provide flight instrumentation data. These antennas will survive temperature extremes of 3,000°F and can operate in a 1,000°F environment for five minutes.

These antennas are constructed of a quartz aperture in a stainless steel body. An adjustable mounting flange threads onto the antenna body and may be shaped to fit any diameter vehicle greater than 3.5 inches. These antennas are

extremely small and lightweight. They may be used singly or in arrays of two, three, or more to achieve specific pattern coverage. Two, three-, and four-way matched power dividers and interconnecting cables are available to join the antenna elements into an array.

Right-hand circular polarization is standard. Left-hand circular polarization is available upon request.

Electrical Specifications				
Type Number	102110	107015	106002	108013
Function:	Telemetry	MDI	Beacon Track	Beacon Track
Frequency, GHz:	2.20-2.40	4.40-4.80	5.40-5.90	8.9-9.5
VSWR (50 OHMS:) Max.	2.0:1	1.75:1	1.75:1	2.0:1
Polarization:	RHCP	RHCP	RHCP	RHCP
Power Handling:	1 KW Peak	1 KW Peak	1 KW Peak	1 KW Peak
	28W CW	low cw	low cw	low cw
Beamwidth, Nominal:	70°	70°	70°	70°
Gain, Minimum:	6 dBic	6 dBic	6 dBic	6 dBic
Connector:	SMA	SMA	TNC/SMA	NC

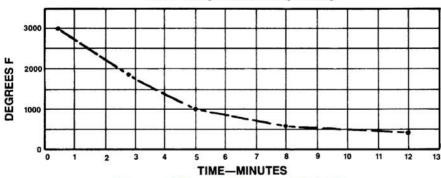
Designed To

Shock: MIL-E-5400

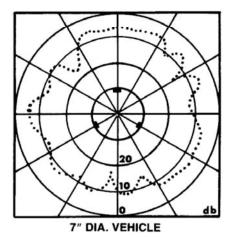
Vibration: Curve III MIL-STD-810
Temperature Alt: 200,000 FT MIL-STD-810

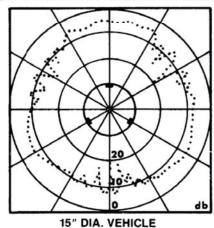
Innovative Antenna Solutions

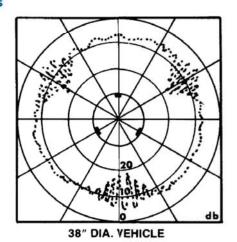
Time-Temperature Capability



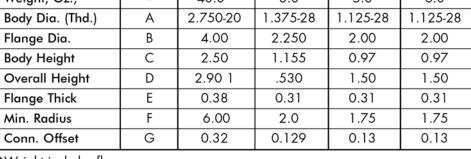
Array of Three Antennas, 5.6 GHz **Typical Roll Plane Radiation Patterns**

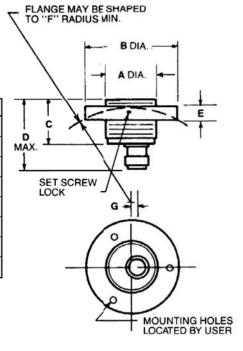






Type Number Letter 102110 107015 106002 108013 40.0* Weight, Oz.,* 8.0 5.0 6.0 2.750-20 1.375-28 1.125-28 1.125-28 Body Dia. (Thd.) Α 4.00 2.250 2.00 2.00 Flange Dia. В C 2.50 1.155 0.97 0.97 **Body Height** Overall Height 2.90 1 .530 1.50 1.50 D Flange Thick Ε 0.38 0.31 0.31 0.31 F Min. Radius 6.00 2.0 1.75 1.75 Conn. Offset G 0.32 0.129 0.13 0.13





^{*}Weight includes flange