



M27-942 SPECIFICATIONS

M27-942 COMMS Transducer

OVERVIEW

The M27-942 is a transducer ideal for use as a beacon, transponder, or in other communication systems. The performance and mounting interface of the M27-942 is similar to the ITC 3013. These transducers are mountable, directional, and good from mid to high frequencies.



CHARACTERISTICS

PHYSICAL:

Maximum Operating Depth	6000 Meters*
Weight in Air	1.4 Kg
Storage Temperatures	-40°C to +70°C
Operating Temperatures	0°C to +35°C
Connector	Individual Solder Pins
End-Cap Style	Titanium, O-ring seal, exposed solder terminations [Anodized Aluminum 6061 available, 1500m depth rating, mounted]

ACOUSTIC:

Frequency Band	8-16 kHz
TVR in Band	>130 dB re 1 μPa/V @ 1 m
Maximum Drive Voltage	1000 Vrms
Maximum SPL	197 dB re 1 μPa @ 1 m
Beam Pattern	Hemispherical
Capacitance	14 nF
Cavitation Depth at 197 dB re μPa @ 1 m	80 Meters

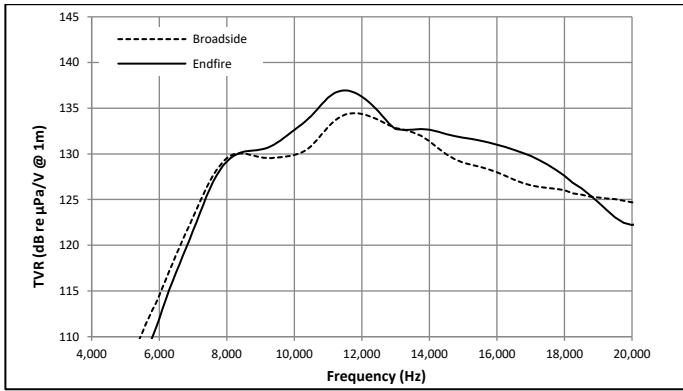


Figure 1: Transmit Voltage Response for M27-942

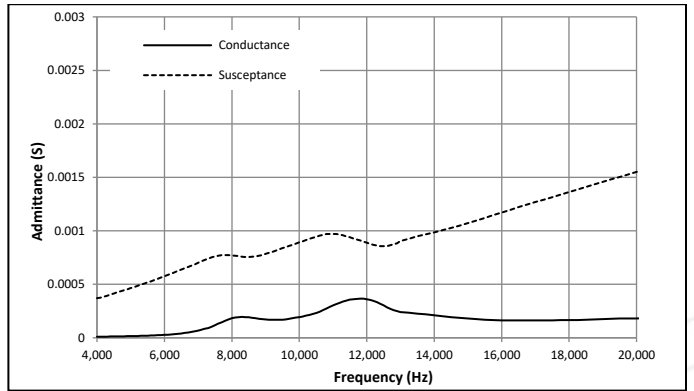


Figure 2: Admittance Plot for M27-942

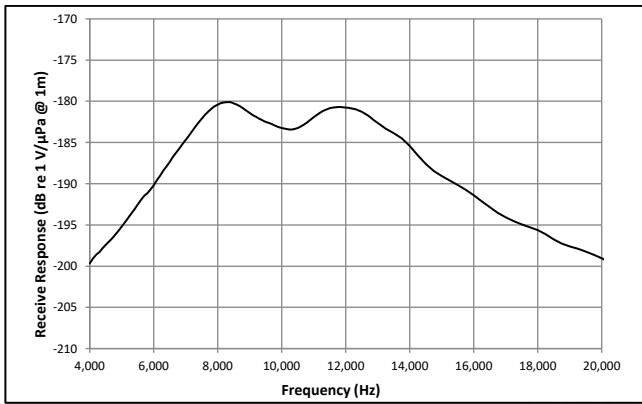


Figure 3: Receive Response for M27-942

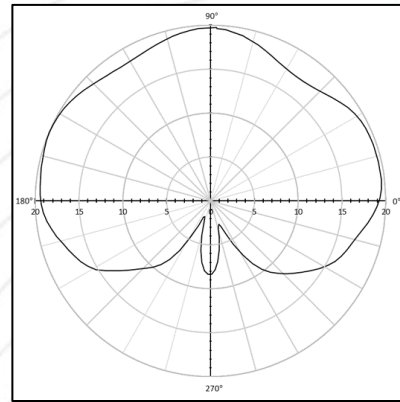


Figure 4: Beam Pattern for M27-942 at 12kHz

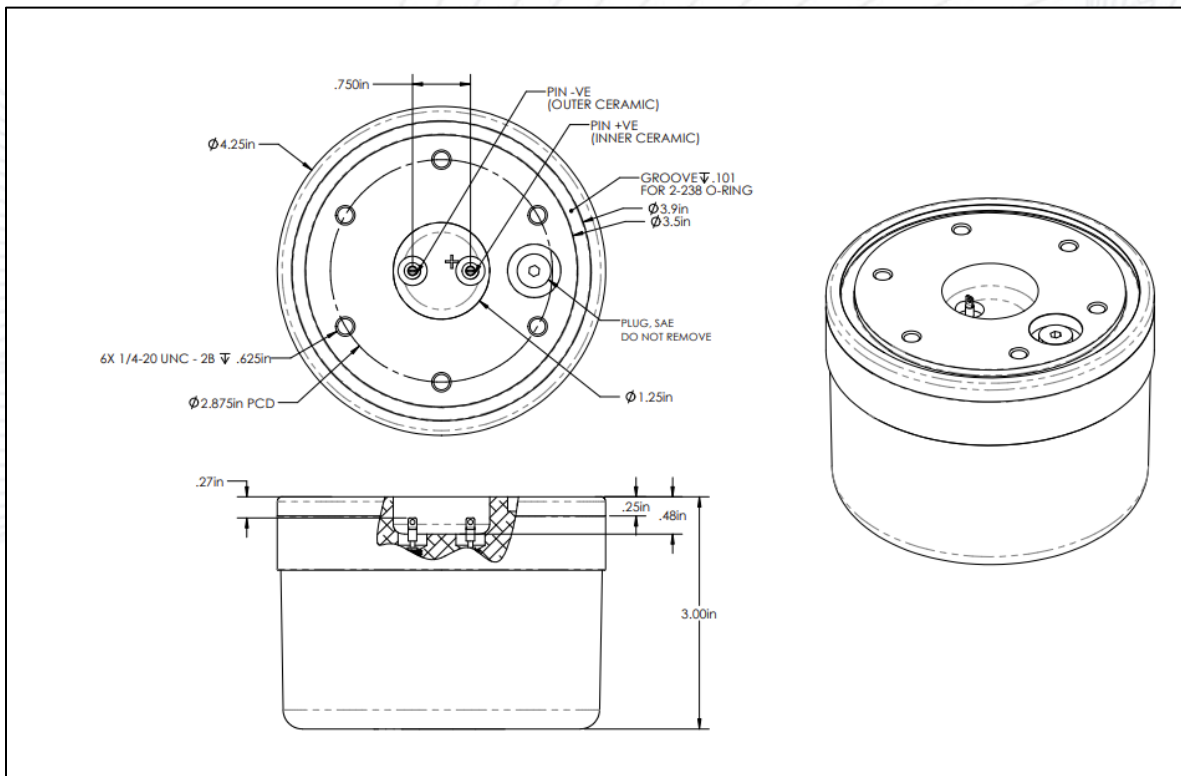


Figure 5: Dimensions of the M27-942 with labeled pin out