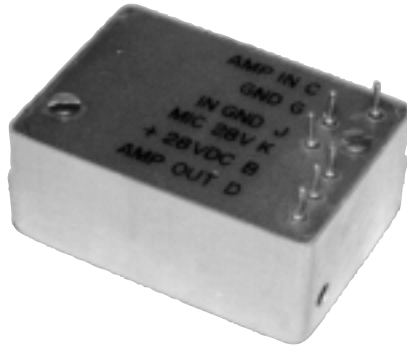


**Interphone Microphone Amplifier  
Model A642**



**Model A642**

**GENERAL CHARACTERISTICS**

|                             |  |
|-----------------------------|--|
| Input Power.....            | .1 ampere @ 28 VDC<br>Protected against 600 V<br>spike and transient requirements<br>of MIL-STD-704A |
| Size.....                   | 2 1/2" W x 1 3/4" H x 1 3/8" D<br>over terminals   |
| Weight.....                 | 5 oz. Maximum  |
| ENVIRONMENTAL.....          | MIL-E-5400 Class 1   |
| Temperature                 |  |
| Continuous Operation.....   | -54° C to +55° C   |
| Intermittent Operation..... | +55° C to -71° C   |

**PERFORMANCE**

|   |                                    |
|---|------------------------------------|
| Gain.....   | Adjustable from 20.5 dB to 33.5 dB |
| Input Impedance.....                                | 100 ohms                           |
| Output Impedance.....                               | 830 to 10,000 ohms                 |
| Frequency Response.....                             | +/-2 dB 400 to 6000 Hz             |
| Distortion.....                                     | 5% maximum @ 10V output            |
| Ripple Rejection.....                               | 55 dB minimum                      |
| Stable and protected against open or short circuits |                                    |

**DESCRIPTION AND USE**

The A642 is a miniature, encapsulated, solid-state microphone amplifier for use in interphone or other voice audio systems. It is a highly reliable and rugged unit with great flexibility. The amplifier provides bias current for a carbon microphone, has adjustable gain, and will operate satisfactorily with a wide variation in output load.

C46-5393 Rev B