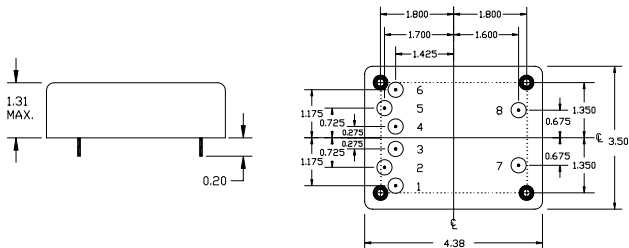


The 7444 series are passive bandpass filters designed for use in signalling, monitoring and supervisory systems where safety is critical and the filter must be stable over the range of temperatures experienced in an unheated, non air-conditioned vehicle exposed to all North American environmental conditions.



- The safety critical design feature provides that if any internal component becomes an open or short circuit, the output signal falls by at least 18 dB below normal.
- The temperature stability is enhanced by selecting the resonant components such that the temperature coefficient of inductance is the inverse of the temperature coefficient of capacitance. In addition, the components are subjected to prolonged temperature cycling, before tuning, so as to minimize the disaccommodation factor of the ferrite materials.
- The filters are hermetically sealed in a plated steel can for long life under a wide range of environmental conditions including high relative humidity.
- All filters will tolerate 350 volts peak-to-peak at out of band frequencies.
- The filters are PC board mountable with solderable pins in glass to metal seals. There are four 8-32 threaded inserts for secure mounting when subjected to vibration.

MECHANICAL (All dimensions in inches)



ELECTRICAL SPECIFICATIONS @ 25°C

Center frequency range:	.....	.250 Hz to 10 kHz
Bandwidth @ ± 3 dB:	.....	± 25 Hz to ± 250 Hz
Input level range:	.....	0.1 V to 3.5 Vrms
Input Impedance:	.....	200 Ω
Output Impedance:	.....	2500 Ω
Steepness factor:	.....	.5 - 15
Steepness factor is defined as:	.....	<u>Bandwidth at 60 dB</u> Bandwidth at 3 dB
Voltage Insulation:	.....	.750 VDC from input terminals to output terminals
Operating temperature:	.....	-20°C to +50°C
Storage temperature:	.....	-40°C to + 80°C

Note: Other frequencies, bandwidths, impedances and other characteristics are available upon request.

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