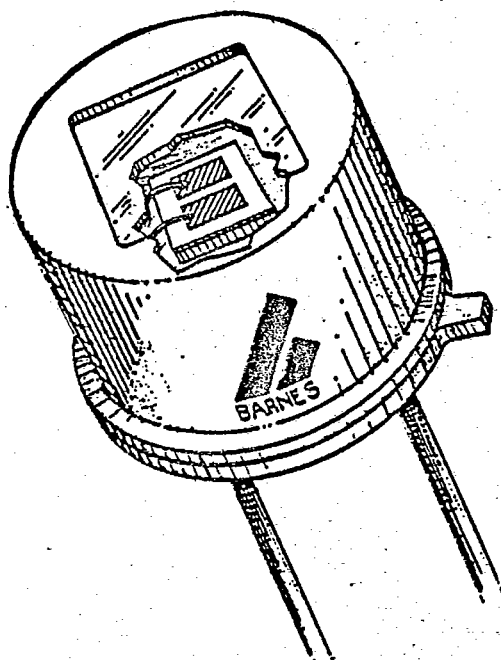


T-41-67



Infrared Intrusion Alarm Detectors Series L-700

- Low Cost
- Rugged Construction
- High Sensitivity
- Filter Window
- FET Preamplifier
- Dual Element
- Wide Field-of-View



The Series L-700 detectors are dual element pyroelectric devices which have an impedance-matching FET preamplifier and a 7 micron cut-on filter window. They are assembled in a TO-5 package which is hermetically sealed. This construction and the high Curie temperature of 620°C for lithium tantalate provide a rugged, highly sensitive device with excellent long term stability. These devices are used in passive IR intrusion systems. They provide advantages over existing systems since they are not affected by normal disturbances such as noise, air motion, vibration, sound and signal transmission.

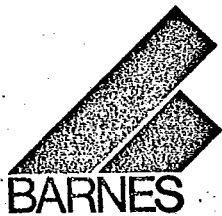
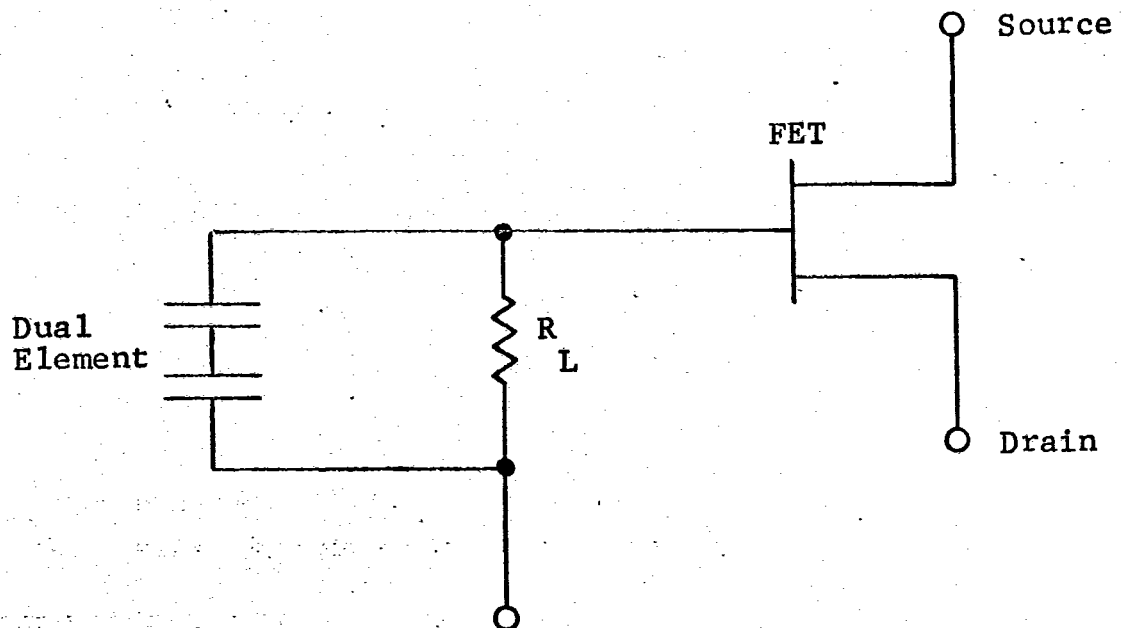
TYPICAL CHARACTERISTICS

T-41-67

Material	Lithium Tantalate
Number of Elements*	Two
Element Size*	1.75mm x 0.8mm
Spacing*	0.3mm
Package*	T0-5
Responsivity at 10 μ	2000 VW ⁻¹ (min.)
NEP (10.0 μ , 1 Hz, 1 Hz)	1x10 ⁻⁹ W Hz ^{-1/2} (max.)
D*	1x10 ⁸ cm Hz ^{1/2} W ⁻¹ (min.)
Pressure Sensitivity	200mv mbar ⁻¹ (max.)
Field-of-View	120°
Operating Temperature	-10°C to 70°C
Thermal Time Constant	1 sec. (max.)

*Custom sizes and packages available on request.

TYPICAL CIRCUIT DIAGRAM



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