



53037 SPST SOLID-STATE RELAYS

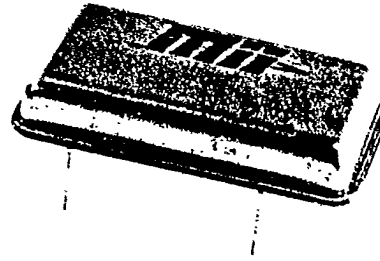
MICROPAC INDUSTRIES INC

T-25-31

AC, MILITARY SOLID STATE RELAYS

FEATURES:

- SPST Normally Open
- 1500 VAC RMS Optical Isolation
- TTL Compatible Input
- Zero Voltage Turn-On
- Designed to the Specifications of MIL-R-28750/9



GENERAL DESCRIPTION

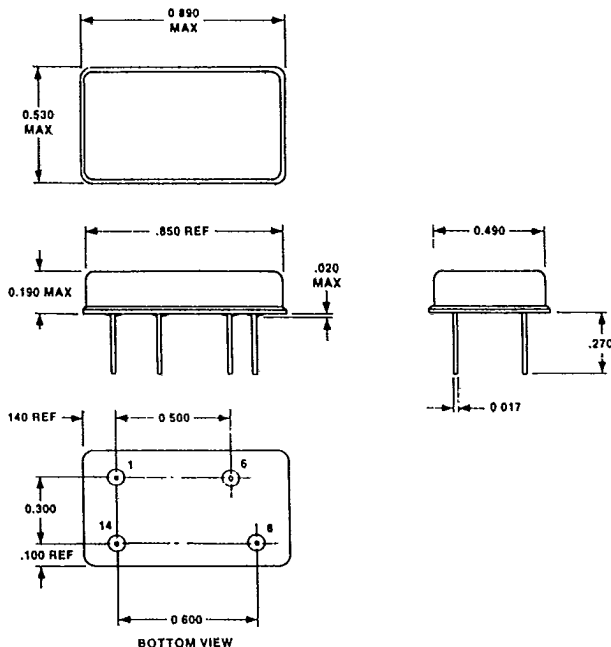
The Mii 53037 is a military, SPST solid-state relays. This small light-weight device is resistant to damage from shock and vibration. Solid state construction makes it immune to contact related problems inherent in mechanical equivalents.

Effective isolation between input and output stages of 1500 VAC RMS is achieved through optical coupling. Parallel output SCRs allow switching of both resistive and reactive loads with power factors to 0.2. Zero crossing turn-on synchronization of the output SCRs is employed to give the lowest possible EMI.

The control is TTL compatible and will accommodate supplies ranging from 3.8 and 32 VDC.

These solid state relays are ideal for use in military systems or wherever high reliability, low power actuation, small size, and light weight are design considerations.

OUTLINE DIMENSIONS



Micropac Industries, Inc. • 905 E. Walnut St. • Garland, Texas 75040 • (214) 272-3571
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SPST SOLID-STATE RELAYS

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ABSOLUTE MAXIMUM RATINGS

Continuous Operating Output Voltage.....250 VAC
 Load Current (With Heat Sink).....2 Amps AC
 Control Logic Input Voltage.....32 VDC
 Operating Temperature.....-55°C to 110°C
 Storage Temperature.....-55°C to 110°C

ELECTRICAL CHARACTERISTICS

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Control Characteristics					
Input Voltage Range		3.8		32	VDC
Assured Turn-On Voltage				3.8	VDC
Assured Turn-Off Voltage		1.5			VDC
Input Current				18	mA
Turn-On Time				1/2 cyc	Hz
Turn-Off Time				1 cyc	Hz
Dielectric Strength	60 Hz. Sine Wave	1500			VAC RMS
Insulation Resistance		100			Meg Ohm
Output Characteristics					
Output Current	25 °C with Heat Sink			2	Amps
Output Voltage	40 to 440 Hz			250	VAC RMS
Output Voltage Drop				1.5	Volts
Leakage Current				3	mA RMS
Overload Current	Value is 1.5 x I _{derated} ; @ 25 °C I _{overload}			3	A
DC Offset				±100	mV
Operating Temperature		-55		110	°C
Storage Temperature		-55		125	°C

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