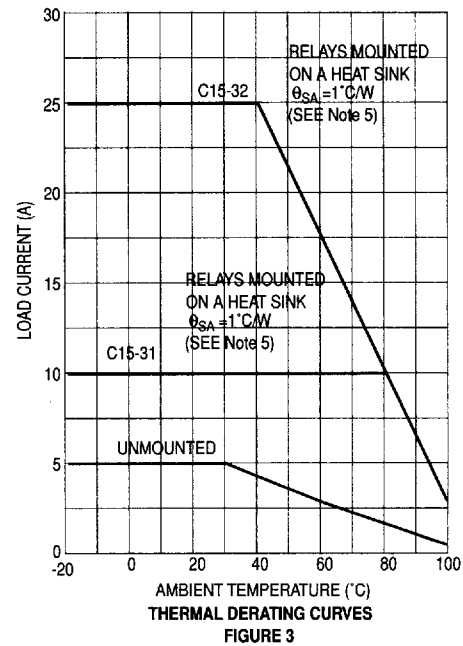
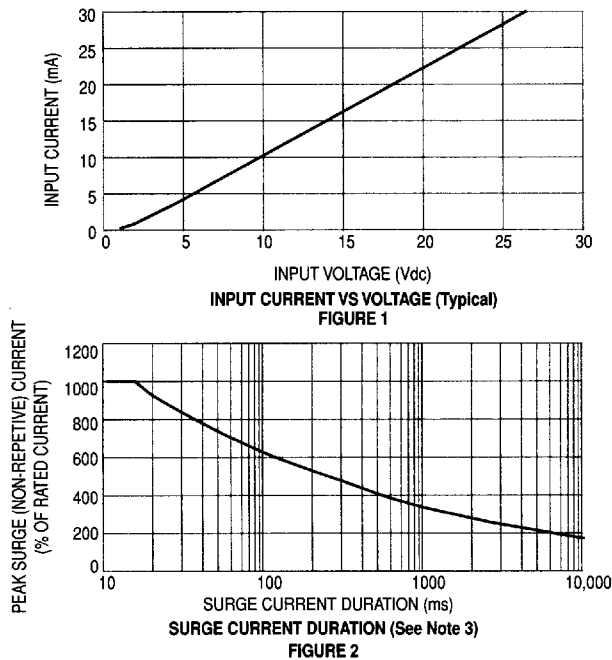
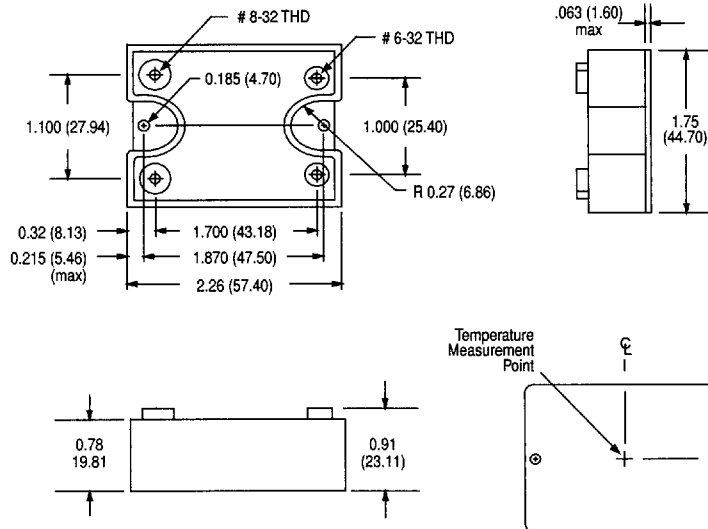


CHARACTERISTIC CURVES



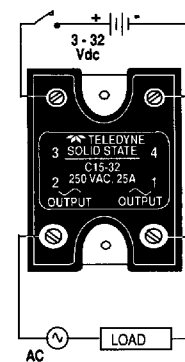
MECHANICAL SPECIFICATION



- Operating & Storage Temperature -40°C to 100°C
- Weight: 4 oz. maximum
- Case Material: Plastic, self-extinguishing
- Base Plate Material: Aluminum
- Case Color: Black

DIMENSIONS ARE SHOWN IN INCHES (MILLIMETERS)
TOLERANCES: XX ± 0.02 (0.50), XXX ± 0.01 (0.25)

WIRING DIAGRAM



* Internal snubber network for dv/dt protection and low EMI

NOTES:

1. For frequencies above 70 Hz turn on voltage is 6.0 Vdc minimum.
2. All tests are performed with a line voltage of 220 Vrms.
3. Output may lose blocking capability during and after surge until T_J falls below maximum.
4. The dv/dt rating is based on a source impedance of 50 Ω .
5. Relays mounted with silicone grease on a 1°C/W heat sink

ELECTRICAL SPECIFICATIONS

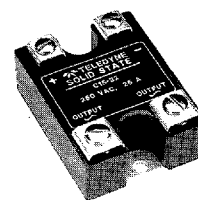
(25°C UNLESS OTHERWISE SPECIFIED)

INPUT (CONTROL) SPECIFICATIONS

Parameter	Min	Max	Units
Control Voltage Range	3.0	32.0	Vdc
Input Current At (See Figure 1)	@5 Vdc	5.0	mA
	@32 Vdc	34.0	
Must Turn-On Voltage (See Note 1)	3.0		Vdc
Must Turn-Off Voltage		1.0	Vdc
Reverse Voltage Protection		-6.0	Vdc

OUTPUT (LOAD) SPECIFICATIONS

Parameter	Min	Max	Units
Load Voltage Range (See Note 2)	25.0	280	Vrms
Output Current Rating (See Figure 3)	C15-31	0.25	Arms
	C15-32	0.25	
Frequency Range (See Note 1)	47.0	440	Hz
Over Voltage Rating		600	Vpeak
On-State Voltage Drop (Rated Current & 60 Hz)		1.6	Vrms
Zero Voltage Turn-On		± 15	Vpeak
Surge Current Rating (See Figure 2 and Note 3)		1000	%
Turn-On Time		1/2	Cycle
Turn-Off Time		1	Cycle
Leakage Current (Off-State)	At 60 Hz	5.0	mArms
	At 400 Hz	10.0	
Off-State dV/dt (See Note 4)	200		V/μs
Isolation (Input to Output, Input to Case, Output to Case)	10 ⁹		Ohms
Dielectric Strength	4000		Vac
Capacitance (Input to Output)		10.0	pF
Junction Temperature (T _J)		125	°C
Thermal Resistance (θ _{JC})	C15-31	2.5	°C/W
	C15-32	1.2	
Thermal Resistance (θ _{JA})	C15-31	15	°C/W
	C15-32	14	

**FEATURES/BENEFITS**

- Switches 400 Hz - Suitable for aircraft & aerospace applications
- Optical Isolation - Isolates control circuits from switching transients
- Floating Output - Eliminates ground loops Eliminates signal ground noise
- Zero Voltage Turn-On - Minimum switching transient noise and reduced EMI
- Switches High Currents - To 25 mArms
- High Dielectric Strength - For safety and for protection of control and signal level circuits
- Broad Temperature Range - Near Mil-Spec. operation in an industrial relay
- UL and CUL registered, File Number E55197

DESCRIPTION

The C15 series solid state relays employ back-to-back SCRs with a zero crossing turn-on circuit. The tight zero switch window ensures reliable low transient and low EMI noise generation. Optical isolation of control from output prevents switching noise from coupling into signal, power and ground distribution systems for noise free power switching. This series of solid state relay can switch from 10 to 25 Arms to 280 Vrms.