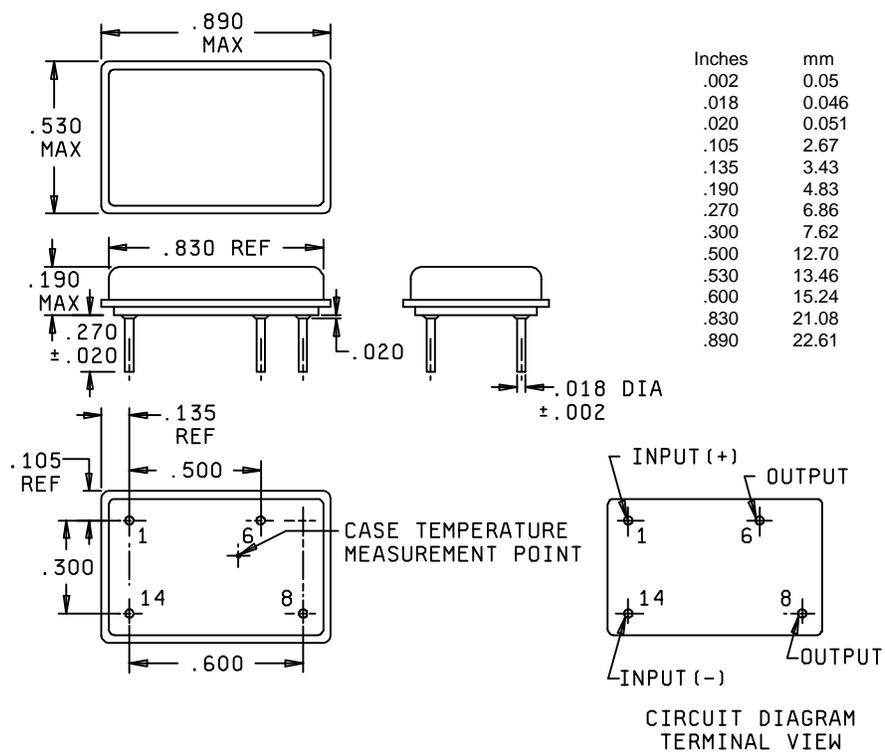


PERFORMANCE SPECIFICATION SHEET

RELAY, SOLID-STATE, HERMETICALLY SEALED, CLASS II, OPTICALLY ISOLATED,
 ZERO VOLTAGE TURN-ON, 1 AMPERE (2 AMPERES WITH HEAT SINK),
 400 HZ, POWER SWITCHING, SPST (N.O.)

This specification is approved for use by all Departments and
 Agencies of the Department of Defense.

The requirements for acquiring the relay described herein shall
 consist of this specification and MIL-PRF-28750.



NOTES:

1. Dimensions are in inches.
2. Metric equivalents given for general information only.
3. Unless otherwise specified, tolerance is ± 0.010 (0.25 mm).
4. Terminal numbers shown above are for reference only.

FIGURE 1. Outline drawing and dimensions.

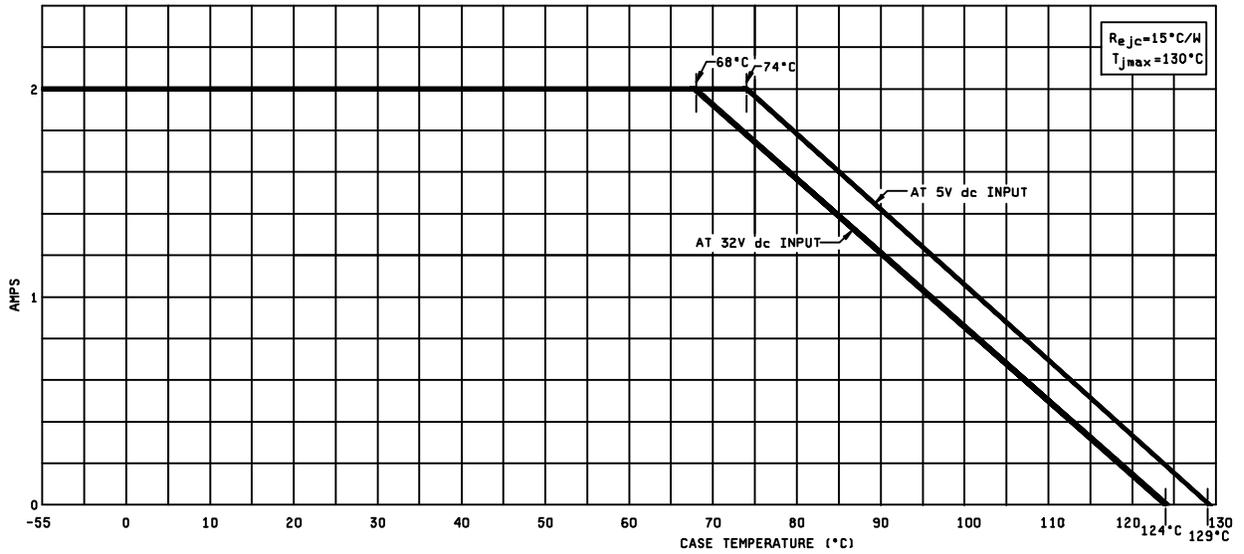


FIGURE 2. Maximum load current vs. case temperature.

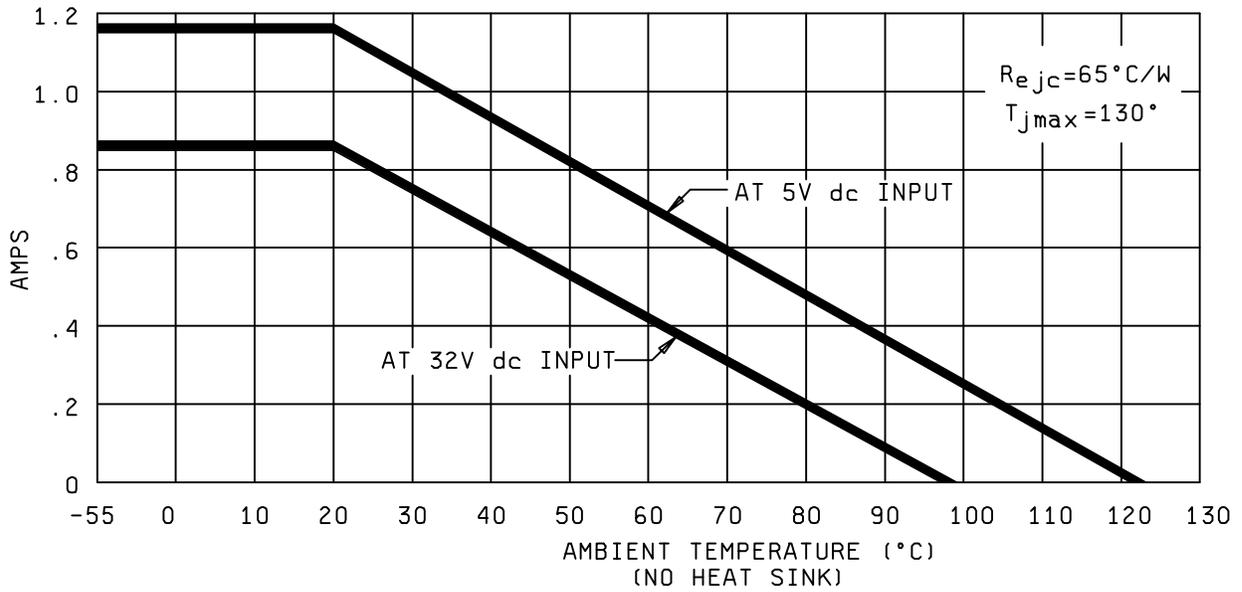


FIGURE 3. Maximum load current vs. ambient temperature.

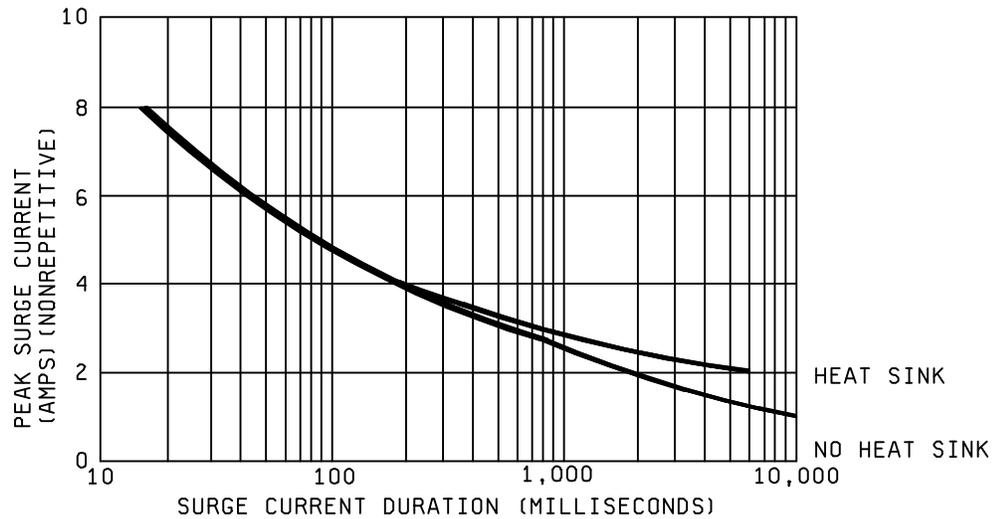


FIGURE 4. Peak surge current vs. surge current duration.

REQUIREMENTS:

INPUT REQUIREMENTS:

Input voltage range: 3.8 V dc to 32 V dc.

Assured turn-on voltage: ≤ 3.8 V dc.

Assured turn-off voltage: ≥ 1.5 V dc.

Input current: 18 mA dc maximum.

Turn-on time: $\frac{1}{2}$ cycle ac Hz.

Turn-off time: 1 cycle ac Hz.

Bias voltage: Not applicable.

OUTPUT REQUIREMENTS:

Rated output current: See figure 2 and figure 3.

Rated output voltage: 250 V ac rms maximum, 400 Hz.

Output voltage drop: 1.5 V ac maximum.

Output leakage current: 3 mA rms maximum.

Crosstalk: Not applicable.

Transient voltage: 130 V rms at 400 Hz, diode peak inverse voltage 500 V peak (5 seconds maximum). (Relay can be externally protected to meet the requirements of MIL-STD-704, category B).

Electrical system spike: Not applicable.

Overload: 1.5 times the rated current (no heat sink), 10 percent duty cycle (see figure 4).

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DC offset voltage: ± 100 millivolts maximum.

Waveform distortion: 4 V rms maximum, initial turn-on: ± 10 V peak maximum.

Minimum current: Applicable (load current shall be varied between 10 percent and 100 percent of rated load).

ELECTRICAL REQUIREMENTS:

Dielectric withstanding voltage: 1,500 V ac rms, 60 Hz.

Insulation resistance: 100 megohms minimum.

Isolation: 10 picofarads maximum.

Power dissipation: 2.00 watts maximum (no heat sink).

Exponential rate of voltage rise (dv/dt): Not applicable.

ENVIRONMENTAL REQUIREMENTS:

Temperature:

Operating: -55°C to $+110^{\circ}\text{C}$.

Storage: -55°C to $+125^{\circ}\text{C}$.

Thermal shock: Applicable.

Shock (specified pulse): MIL-STD-202, method 213, test condition F (1500 g's).

Vibration: 20 g's, 10 Hz to 2,000 Hz.

Moisture resistance: Not applicable.

Resistance to soldering heat: Applicable.

Salt atmosphere (corrosion): In accordance with MIL-STD-750, method 1041.

PHYSICAL REQUIREMENTS:

Weight: 6 grams maximum.

Dimensions and configuration: See figure 1.

Terminal strength: 1 pound pull minimum.

Terminal solderability: Applicable.

Terminal finish: Corrosion resistant material. Corrosion resistant material such as gold plating are considered acceptable.

Seal: Hermetic (solder or weld).

Minimum marking: Part number, functional diagram and terminal identification, date code, and manufacturer's name or source code.

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

Custodian:
Navy - EC
Air Force - 85

Preparing activity:
DLA - CC

(Project 5945-0980-01)