



TO-5 CASE SOLID STATE RELAY

40 Vdc/250mA Output

CSS-6-1
C.O.T.S.
M28750/6

FEATURES:

- Transformer isolation
- High switching speed
- TTL compatible
- Hermetic TO-5 package

ELECTRICAL SPECIFICATIONS:

Input Data:

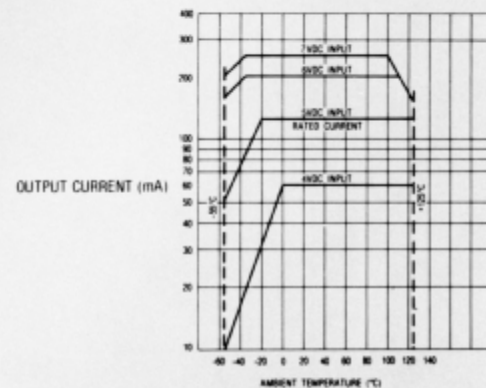
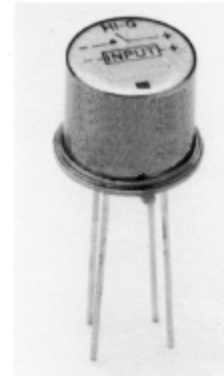
- Input voltage range:** 4.0 to 7 V dc.
Rated turn-on voltage: 5.0 V dc.
Rated turn off voltage: 1.0 V dc maximum.
Input current: 22 mA V dc maximum at rated voltage.
Turn-on time: 10 microseconds maximum at rated voltage.
Turn-off time: 15 microseconds maximum from rated voltage.

Output Data:

- Rated output current:** See Graph.
Rated output voltage: 40 V dc.
Output voltage drop: 0.5 V dc maximum
Output leakage current: 100 microamperes maximum at rated voltage.
Overload: 1.5 × rating for 5 ms, 1 percent duty cycle.

Electrical Data:

- Dielectric withstanding voltage:** 1,000 V ac (P-P), 60Hz, all terminals to case.
Insulation resistance: 100 megohms at 500 V dc. all terminals to case.
Isolation: 10 picofarads tested at 1 kHz.
Power dissipation: 260 milliwatts maximum at rated voltage.



OUTPUT CURRENT VS. INPUT CONTROL VOLTAGE AND AMBIENT TEMPERATURE

ENVIRONMENTAL DATA:

- Temperature (operating and storage):** -55° C to +125° C.
Shock (specified pulse): MIL-STD-202, method 213, test condition F (1500 G's).
Vibration: MIL-STD-202, method 204, test condition H, except peak value shall be 100 G's (10 to 2,000 Hz).
Salt spray (corrosion): In accordance with MIL-STD-750, method 1041.

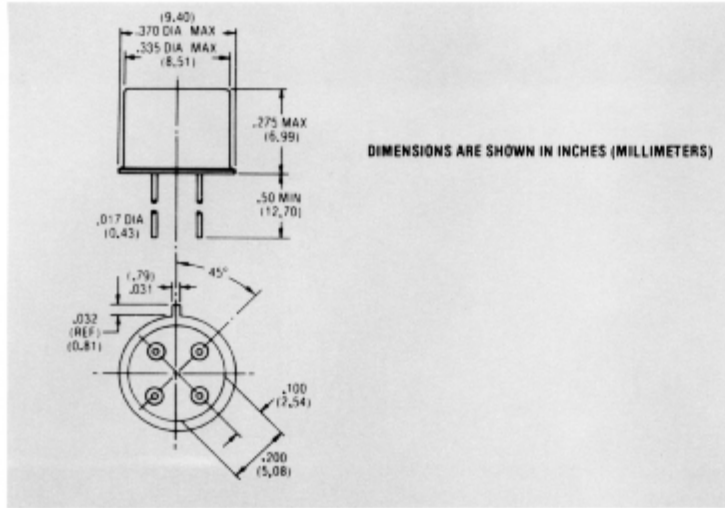
PHYSICAL DATA:

- Terminal strength (MIL-STD-202, method 211):**
Pull test: Test condition A, 1 pound pull.
Bend test: Test condition C, ½ pound load.
Twist test: Test condition D.
Weight: 5 grams (.18 ounce) typical.
Seal: Hermetic, 10⁻⁹ ATM CM³/S.

SPECIAL NOTES:

- Reversing polarity of input or output may cause permanent damage.
- Input must be a step function. Rise or fall time, as applicable, not to exceed 100µ seconds.
- Inductive loads must be diode suppressed.
- For any control voltage, the maximum load current value shown on graph must not be exceeded. Attempting to draw currents in excess of these curves can cause permanent damage.

MECHANICAL SPECIFICATIONS



WIRING DIAGRAM

