



# SOLID STATE RELAY

50 Vdc/600mA

CSS-8-1

C.O.T.S.

M28750/8

## FEATURES:

- 1000 V rms optical isolation
- High switching speed
- Hermetically sealed-low profile DIP pkg.
- Logic compatible input

## ELECTRICAL SPECIFICATIONS:

### Input Data:

- Input voltage range:** 3.0 V dc to 16.0 V dc.
- Rated turn-on voltage:** 3.0 V dc.
- Rated turn-off voltage:** 1.0 V dc maximum.
- Input current:** 18 mA dc maximum.
- Turn-on time:** 50 microseconds maximum.
- Turn-off time:** 150 microseconds maximum.

### Output Data: (At 25° C unless otherwise specified.)

- Rated output current:** See Figures 1 and 2.
- Rated output voltage:** 50 V dc maximum.
- Output voltage drop:** 1.4 V dc maximum.
- Output leakage current:** 60 microamperes maximum.

### Electrical Data:

- Dielectric withstanding voltage:** 1,000 V ac rms, 60Hz, all terminals to case.
- Insulation resistance:** 100 megohms minimum at 500 V dc.
- Isolation:** 5 picofarads maximum.
- Power dissipation:** 1.14 watts maximum.

## Environmental Data:

### Temperature:

- Operating:** -65° C to +125° C.
- Storage:** -65° C to +150° C.

**Shock (specified pulse):** MIL-STD-202, method 213, test condition I (100 G's).

**Vibration:** MIL-STD-883, method 2007, test condition B (50 G's) except frequency shall be 10 to 3,000 Hz

**Acceleration:** 5,000 G's, Y1 axis, MIL-STD-883, method 2001, test condition A.

**Electromagnetic interference:** Maximum broadband conducted emission on power lines with 30 V dc, 0.5 ampere resistive load during steady-state and switching conditions.

## Physical Data:

- Weight:** 5 grams (typical).
- Terminal strength:** 1 pound pull minimum.
- Seal:** Hermetic, 10<sup>-8</sup> ATM CM<sup>3</sup>/S.

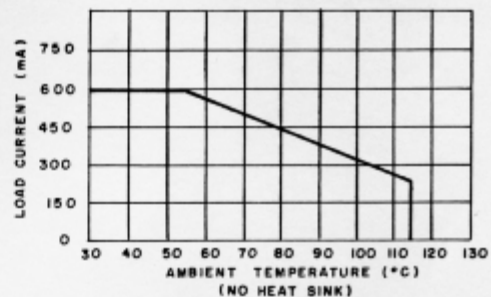
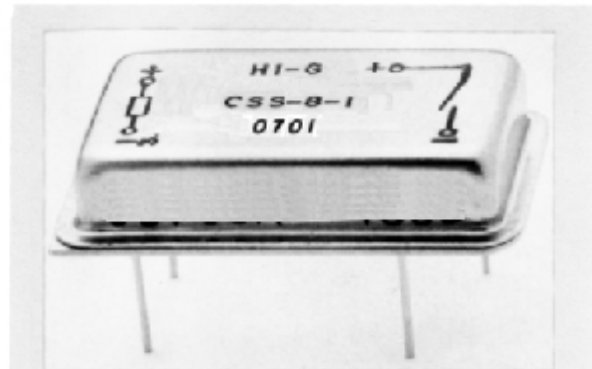


FIGURE 1 Maximum load current vs. ambient temperature.

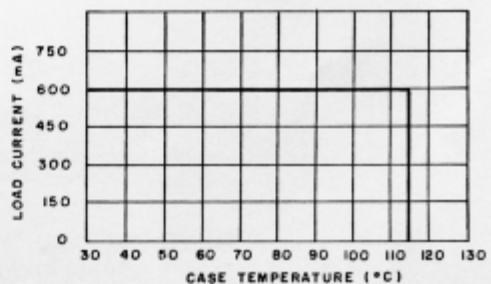
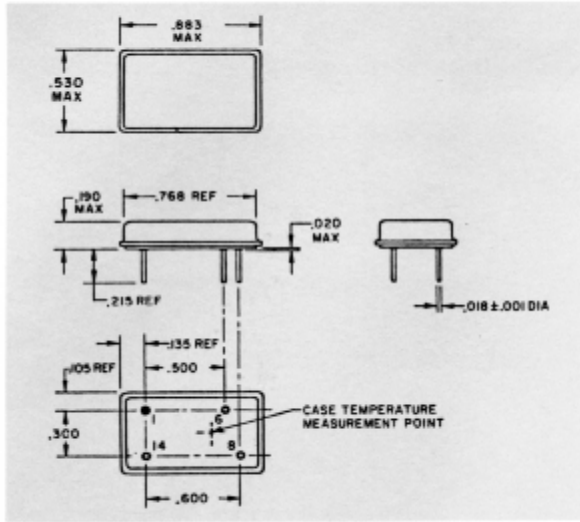


FIGURE 2 Maximum load current vs. case temperature.

## SPECIAL NOTES:

- Reversing polarity of output may cause permanent damage.
- Inductive loads must be diode suppressed.

## MECHANICAL SPECIFICATIONS



## WIRING DIAGRAM

