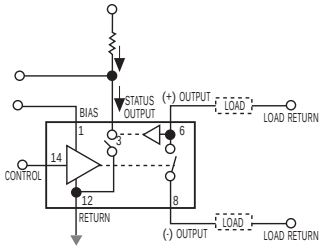
DC SOLID STATE RELAYS

DS11 SERIES

2 AMP

MEETS DESC DRAWINGS 88061/2



TERMINAL VIEW

FEATURES

- Hermetically sealed DIP package
- Thick film hybrid construction
- Optically isolated
- Low on-resistance (MOSFET Output)
- Optional: Switch status, short circuit protection, trip status.

INPUT CHARACTERISTICS

INPUT VOLTAGE RANGE
3.8 – 32 Vdc

MAXIMUM TURN-ON VOLTAGE
3.8 Vdc

MINIMUM TURN-OFF VOLTAGE
1.5 Vdc

I/O DIELECTRIC
1000 Vrms

OUTPUT CHARACTERISTICS

MAX. OUTPUT CURRENT (CONTINUOUS, 25°C)
2 Adc

MAX. OUTPUT VOLTAGE
80 Vdc

MAX. ON-RESISTANCE
15 milliohms (at 100 mA load)

TURN-ON TIME
3 ms.

TURN-OFF TIME
1 ms.

THERMAL RESISTANCE
Junction to Ambient: 90°C/Watt

ENVIRONMENTAL CHARACTERISTICS

SHOCK
50 G's, 11 ms.

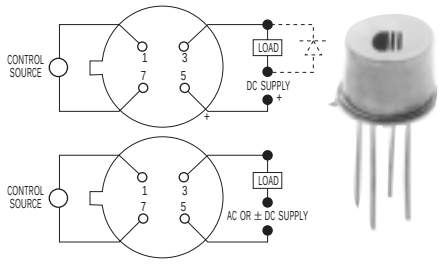
VIBRATION
100 G's, 10 to 3000 Hz

OPERATING AMBIENT TEMPERATURE
-55 to +105°C

TS SERIES

25 TO 250 mA

MEETS MIL-R-28750/5,6, & 7



TERMINAL VIEW

FEATURES

- Hermetically sealed TO-5 package
- Transformer coupled
- High speed switching
- TS5-1Y switches AC or DC

INPUT CHARACTERISTICS

INPUT VOLTAGE RANGE
4.0 – 7.0 Vdc

MAXIMUM TURN-ON VOLTAGE
5.0 Vdc

MINIMUM TURN-OFF VOLTAGE
1.0 Vdc

I/O DIELECTRIC
1000 Vac pk-pk

OUTPUT CHARACTERISTICS

MAX. OUTPUT CURRENT (CONTINUOUS, 25°C)
50 mAac or mAdc (TS5-1Y)
250 mAdc (TS6-1Y)
100 mAdc (TS7-1Y)

MAX. OUTPUT VOLTAGE
40 Vac or Vdc (TS5-1Y)
40 Vdc (TS6-1Y)
250 Vdc (TS7-1Y)

MAX. ON-RESISTANCE
5 ohms (TS5-1Y)

TURN-ON TIME
10 µsec.

TURN-OFF TIME
15 µsec.

ENVIRONMENTAL CHARACTERISTICS

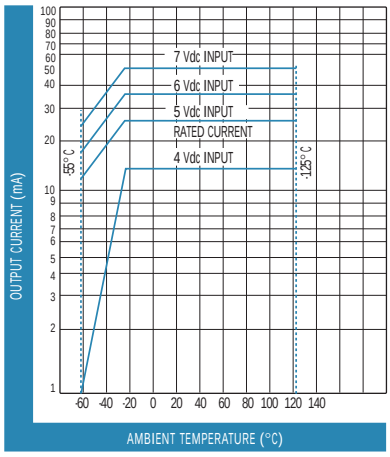
SHOCK
1500 G's, 0.5 ms.

VIBRATION
100 G's, 10 to 2000 Hz

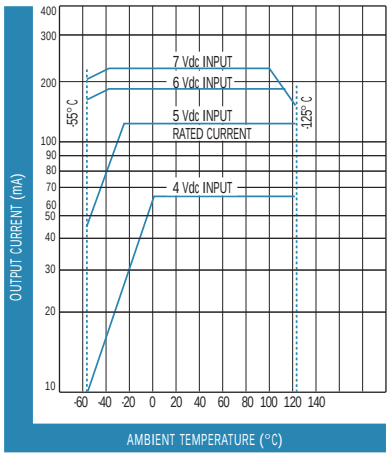
OPERATING AMBIENT TEMPERATURE
-55 to +125°C

Communications Instruments, Inc., 1396 Charlotte Hwy. P.O. Box 520 Fairview, NC 28730 (704) 628-1711 Fax(704) 628-1439

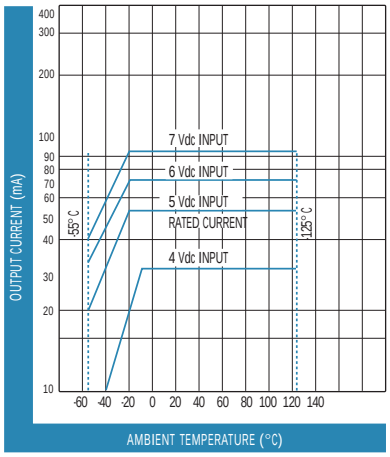
DC SOLID STATE RELAYS



TS5-1Y

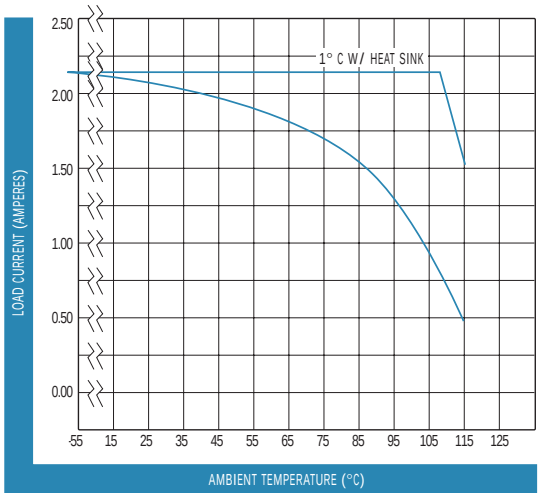


TS6-1Y

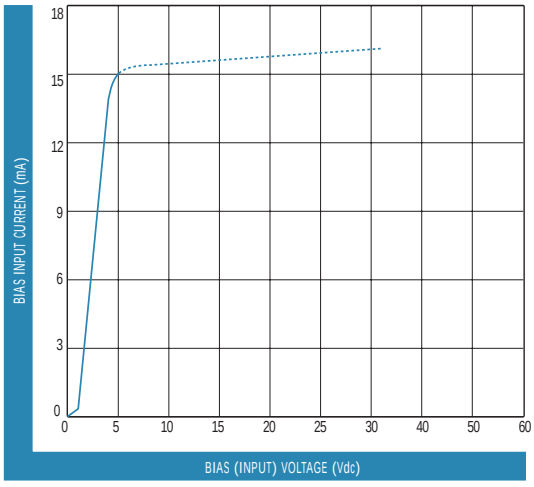


TS7-1Y

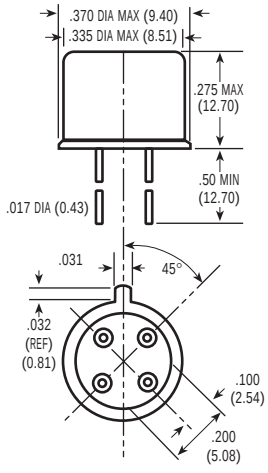
OUTPUT CURRENT VS. INPUT CONTROL VOLTAGE AND AMBIENT TEMPERATURE



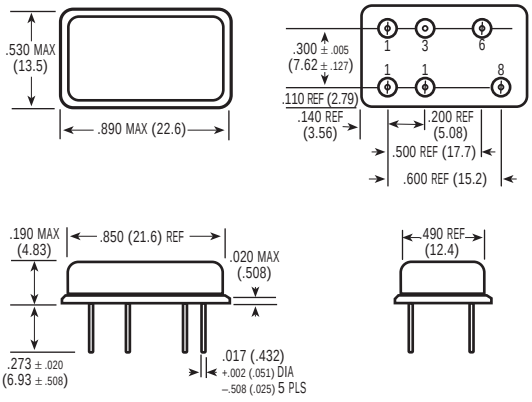
DS11
THERMAL DERATING CURVE



DS11
BIAS (INPUT) CURRENT VS. BIAS (INPUT) VOLTAGE



TS5 / TS6 / TS7



DS11

NOTES: 1) Reversing polarity of input (or output except for TS5-1) may cause permanent damage. 2) Input must be a step function. Rise or fall time, as applicable, not to exceed 100 µsec. 3) Inductive loads must be diode suppressed. 4) For any control voltage, the maximum load current shown on graphs must not be exceeded. Attempting to draw currents in excess of those specified on graphs can cause permanent damage.

NOTES: 1) Reversing polarity of output may cause permanent damage. 2) Inductive loads must be diode suppressed.