

134 Series - Mercury Reed

SPDT, DPDT , 2 Amp

The 134 series are single throw, normally open, miniature mercury reed relays. Reeds are hermetically sealed in glass tubes with trace amounts of liquid mercury to provide continuously refreshed contact surfaces for extremely long life.

The 131 series offers double throw contacts. Both are capable.

GENERAL SPECIFICATIONS (@ 25° C)

Contacts:

| | |
|-----------------------------|--------------------------|
| Contact Configuration | Up To DPDT |
| Contact Material | Liquid Mercury |
| Contact Rating | |
| Load (maximum) | 50VA |
| Switching Voltage (maximum) | 500VDC |
| Switching Current (maximum) | 2 Amp |
| Carry Current (maximum) | 3 Amp |
| Contact Resistance, Initial | 100 milliohms max @ 6VDC |

Coil:

| | |
|------------------------------|------------------------|
| Coils Available | DC |
| Coil Power | Varies |
| Input Voltage Tolerance - DC | 80% to 110% of nominal |
| Drop-out voltage | 10% of nominal |
| Duty | Continuous |

Timing:

| | |
|-------------------------------------------|-------|
| Operate Time (typical w/o suppression) | 2ms |
| Release Time (typical w/o suppression) | 2.5ms |

Dielectric Strength:

| | |
|-----------------------------------|------------------------|
| Across Open Contacts | 1,000VRMS |
| Between Mutually Insulated Points | 1,000VRMS |
| Insulation Resistance | 1,000 megohms @ 500VAC |

Capacitance:

| | |
|----------------------|-------|
| Across Open Contacts | 0.9pF |
|----------------------|-------|

Temperature:

| | |
|-----------|------------------------------|
| Operating | -37 to 85°C (-34.6 to 185°F) |
| Storage | -40 to 105°C (-40 to 221°F) |

Life Expectancy:

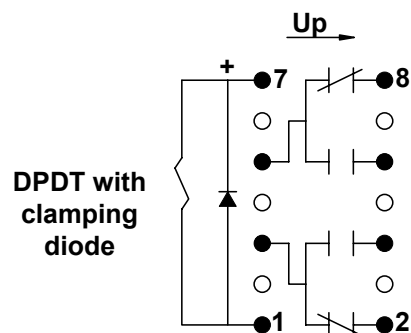
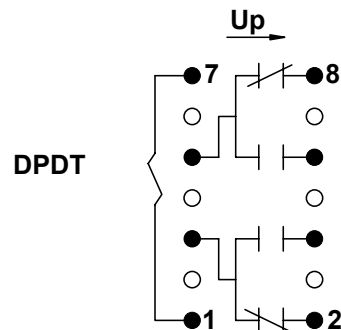
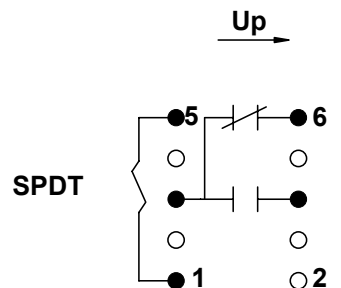
| | |
|-----------------------------------|-------------|
| Electrical (full load operations) | 40,000,000 |
| Mechanical (no load operations) | 100,000,000 |

Miscellaneous:

| | |
|-------------------|--------------------|
| Enclosure | Epoxy encapsulated |
| Mounting Position | Vertical ±15° |
| Weight | Varies |



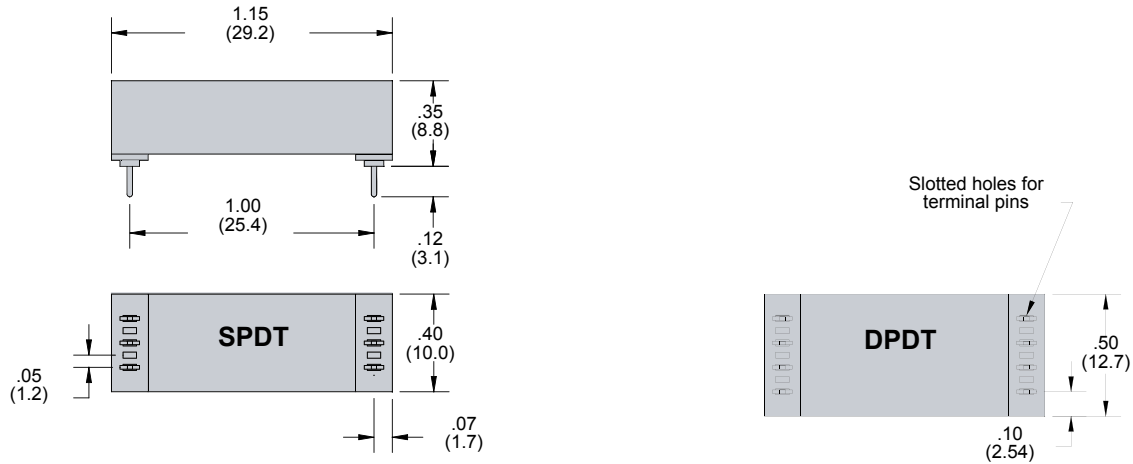
134 Wire Diagram
(Top View)



Reed Relays

Outline Dimensions

Dimensions Shown in inches & (millimeters)



134 Part Number Chart

| Part number | Nominal input voltage | Maximum pull-in | Minimum dropout | Nominal resistance (ohms) | Nominal power (mW) | Maximum Contact Rating | | |
|-----------------------------------------|-----------------------|-----------------|-----------------|---------------------------|--------------------|------------------------|-------------------------------|----------------------|
| | | | | | | Maximum switching load | Switching current and voltage | Carry current (Amps) |
| SPDT Mercury | | | | | | | | |
| 134MPCX-1 | 5 | 4 | 0.5 | 60 | 417 | 50VA | 1 Amps 500VDC | 2 Amps |
| 134MPCX-2 | 12 | 9 | 1 | 330 | 435 | | | |
| 134MPCX-3 | 24 | 18 | 2 | 1400 | 410 | | | |
| DPDT Mercury | | | | | | | | |
| 134MPCX-7 | 5 | 4 | 0.5 | 45 | 560 | 50VA | 1 Amp 500VDC | 2 Amp |
| 134MPCX-8 | 12 | 9.6 | 1 | 230 | 620 | | | |
| DPDT Mercury with Clamping Diode | | | | | | | | |
| 134MPCX-10 | 5 | 4 | 1 | 45 | 560 | 50VA | 1 Amp 500VDC | 2 Amp |
| 134MPCX-11 | 12 | 9.6 | 1 | 230 | 620 | | | |