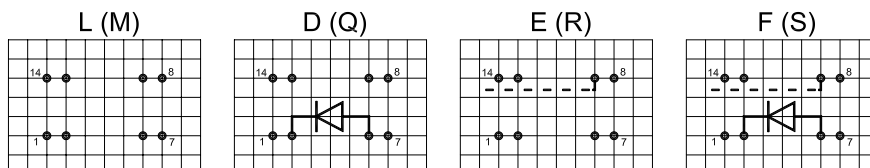


### OPTIONS

( ) Versions with magnetic shield

View from top of component  
2.54mm [0.10"] pitch grid



### OPTIONS DEPENDENCE ON CASE SIZES

| CONTACT FORM | PACKAGE SIZE | PIN OUT | OPTIONS |   |   |   |   |   |   |   |
|--------------|--------------|---------|---------|---|---|---|---|---|---|---|
|              |              |         | L       | D | E | F | M | Q | R | S |
| <b>1A</b>    | Low Profile  | 11      | X       |   | X |   |   |   |   |   |
|              |              | 13      | X       |   |   |   |   |   |   |   |
|              | High Profile | 11      |         | X |   | X | X | X |   | X |
|              |              | 13      |         | X |   |   | X | X |   |   |
| <b>1B</b>    | High Profile | 19      | X       | X |   |   | X | X |   |   |
| <b>2A</b>    | High Profile | 21      | X       | X | X | X | X | X | X | X |
| <b>1C</b>    | Low Profile  | 51      | X       |   |   |   |   |   |   |   |
|              | High Profile |         |         | X | X | X | X | X | X | X |

- L = No option
- D = With Diode between pin 2 and 6 (Pin 2 is positive)
- E = Internal shield on pin 9
- F = With Diode between pin 2 and 6 (Pin 2 is positive) and Internal shield on pin 9
- M = External magnetic shield
- Q = External magnetic shield and diode between pin 2 and 6 (Pin 2 is positive)
- R = External magnetic shield and internal shield on pin 9
- S = External magnetic shield and with diode between pin 2 and 6 (Pin 2 is positive) and internal shield on pin 9

**Molded DIP  
Reed Relays**
**RELAY DATA**

| All data at 20 °C                                                                                                                            | Switch Model →<br>Contact Form →                                  | Contact 72<br>Form A / B             |            |      | Contact 75<br>Form A / B             |            |      | Contact 90<br>Form C                |            |      |                           |
|----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------|------------|------|--------------------------------------|------------|------|-------------------------------------|------------|------|---------------------------|
| Contact Ratings                                                                                                                              | Conditions                                                        | Min.                                 | Typ.       | Max. | Min.                                 | Typ.       | Max. | Min.                                | Typ.       | Max. | Units                     |
| Switching Power                                                                                                                              | Any DC combination of V & A not to exceed their individual max.'s |                                      |            | 20   |                                      |            | 10   |                                     |            | 3    | W                         |
| Switching Voltage                                                                                                                            | DC or peak AC                                                     |                                      |            | 200  |                                      |            | 1000 |                                     |            | 175  | V                         |
| Switching Current                                                                                                                            | DC or peak AC                                                     |                                      |            | 1.0  |                                      |            | 0.5  |                                     |            | 0.25 | A                         |
| Carry Current                                                                                                                                | DC or peak AC                                                     |                                      |            | 1.25 |                                      |            | 1.0  |                                     |            | 1.2  | A                         |
| Static Contact Resistance                                                                                                                    | w/ 0.5V & 50mA                                                    |                                      |            | 150  |                                      |            | 200  |                                     |            | 150  | mΩ                        |
| Dynamic Contact Resistance                                                                                                                   | Measured w/ 0.5V & 50mA 1.5 ms after closure                      |                                      |            | 200  |                                      |            | 200  |                                     |            | 250  | mΩ                        |
| Insulation Resistance (100 Volts applied)                                                                                                    | Across contacts<br>Contact to coil                                | 10 <sup>12</sup><br>10 <sup>12</sup> |            |      | 10 <sup>10</sup><br>10 <sup>12</sup> |            |      | 10 <sup>9</sup><br>10 <sup>12</sup> |            |      | Ω                         |
| Breakdown Voltage                                                                                                                            | Across contacts<br>Contact to coil                                | 320<br>1500*                         |            |      | 1000**<br>1500*                      |            |      | 200<br>1500                         |            |      | VDC                       |
| Operate Time, incl. Bounce                                                                                                                   | Measured w/ 100% overdrive                                        |                                      |            | 0.5  |                                      |            | 0.5  |                                     |            | 0.7  | ms                        |
| Reset Time                                                                                                                                   | Measured w/ no coil suppression                                   |                                      |            | 0.1  |                                      |            | 0.1  |                                     |            | 1.5  | ms                        |
| Capacitance                                                                                                                                  | Across contacts<br>Contact to coil                                |                                      | 0.2<br>2.0 |      |                                      | 0.4<br>2.0 |      |                                     | 1.0<br>3.0 |      | pF                        |
| <b>Life Expectancies</b>                                                                                                                     |                                                                   |                                      |            |      |                                      |            |      |                                     |            |      |                           |
| Switching 5 Volts@ 10mA                                                                                                                      | DC only & <10 pF stray cap.                                       |                                      | 1000       |      |                                      | 500        |      |                                     | 100        |      | 10 <sup>6</sup><br>Cycles |
| For other load requirements please see our life test section located on page 151.                                                            |                                                                   |                                      |            |      |                                      |            |      |                                     |            |      |                           |
| <b>Environmental Data</b>                                                                                                                    |                                                                   |                                      |            |      |                                      |            |      |                                     |            |      |                           |
| Shock Resistance                                                                                                                             | 1/2 sine wave duration 11ms                                       |                                      |            | 50   |                                      |            | 50   |                                     |            | 50   | g                         |
| Vibration Resistance                                                                                                                         | From 10 - 2000 Hz                                                 |                                      |            | 20   |                                      |            | 20   |                                     |            | 20   | g                         |
| Ambient Temperature                                                                                                                          | 10 °C/ minute max. allowable                                      | -20                                  |            | 70   | -20                                  |            | 70   | -20                                 |            | 70   | °C                        |
| Storage Temperature                                                                                                                          | 10 °C/ minute max. allowable                                      | -35                                  |            | 95   | -35                                  |            | 95   | -35                                 |            | 95   | °C                        |
| Soldering Temperature                                                                                                                        | 5 sec. dwell                                                      |                                      |            | 260  |                                      |            | 260  |                                     |            | 260  | °C                        |
| * Selects pin out 13 and 4.25 kVDC (3.0 kVRMS) breakdown voltage contact to coil. ** For higher voltage requirements please consult factory. |                                                                   |                                      |            |      |                                      |            |      |                                     |            |      |                           |