

**PRMA**
**SPECIFICATIONS**

All parameters are at 25°C unless otherwise stated.  
Operate voltage, release voltage, and coil resistance will change approximately 0.4%/°C as ambient temperature varies.

**PRMA**  
Molded 8 Pin  
Form-C  
Dry Reed

**PRMA**  
Molded 8 Pin  
Form-A&B  
Dry Reed

| PARAMETER   | CONDITIONS  | SYMBOL | MIN             | TYP              | MAX  | MIN              | TYP              | MAX  | UNITS                |
|---|---|--------|-----------------|------------------|------|------------------|------------------|------|----------------------|
| <b>Contact Ratings</b>                            |   |        |                 |                  |      |                  |                  |      |                      |
| Switching Voltage                                 | Max DC/PeakAC Resistive   | VL     | -               | -                | 100  | -                | -                | 200  | Volts                |
| Switching Current                                 | Max DC/PeakAC Resistive   | IL     | -               | -                | 0.25 | -                | -                | 0.5  | Amps                 |
| Carry Current                                     | Max DC/PeakAC Resistive   | Ic     | -               | -                | 0.4  | -                | -                | 2    | Amps                 |
| Contact Rating                                    | Max DC/PeakAC Resistive   |        | -               | -                | 3    | -                | -                | 10   | Watts                |
| Life Expectancy                                   | Signal Level 1.0V 10mA<br>Related Loads <sup>(1)</sup>          |        | -               | 20               | -    | 300              | 500              | -    | x10 <sup>6</sup> Ops |
| Static Contact Resistance                         | 50mV, 10mA  | CR     | -               | -                | 200  | -                | -                | 150  | mΩ                   |
| Dynamic Contact Resistance                        | .5V, 50mA at 100Hz, 1.5 msec                                    | DCR    | -               | N/A              | -    | -                | N/A              | -    | mΩ                   |
| Contact Material                                  |   |        | -               | Rh               | -    | -                | Ru               | -    |                      |
| <b>Relay Specifications</b>                       |   |        |                 |                  |      |                  |                  |      |                      |
| Insulation Resistance                             | Between all isolated pins<br>at 100V, 25°C, 40% RH              | IR     | 10 <sup>9</sup> | 10 <sup>10</sup> | -    | 10 <sup>10</sup> | 10 <sup>12</sup> | -    | Ω                    |
| Capacitance                                       | Across Open Contacts  |        | -               | 2.5              | 3    | -                | 0.7              | 1    | pF                   |
| Dielectric Strength                               | Open Contact to Coil  |        | -               | 3                | 3    | -                | 1.5              | 2    | pF                   |
|   | Between Contacts  |        | 250             | -                | -    | 250              | -                | -    | VDC/Peak AC          |
| Operate Time,<br>including bounce                 | Contacts to Coil  | I/O    | 1400            | -                | -    | 1400             | -                | -    | VDC/Peak AC          |
|   | At Nominal Coil Voltage<br>10Hz Square Wave                     | TOP    | -               | 1.5              | 2    | -                | .25              | 0.5  | ms                   |
| Release Time                                      | Zener-Diode Suppression   | TREL   | -               | 1.5              | 3    | -                | .25              | 0.5  | ms                   |
| <b>Environmental Ratings</b>                      |   |        |                 |                  |      |                  |                  |      |                      |
| Storage Temperature                               |   | TA     | -40             | -                | +105 | -40              | -                | +105 | °C                   |
| Operating Temperature                             |   | To     | -40             | -                | +80  | -40              | -                | +80  | °C                   |
| Soldering Temperature                             | Applied to pins, 5 sec. max.                                    |        | -               | 260              | -    | -                | -                | 260  | °C                   |
| Vibration Resistance <sup>(2)</sup><br>(Survival) | 10 Hz - 500 Hz for PRMA Form A&B<br>5Hz - 500Hz for PRMA Form C | G      | -               | -                | 10   | -                | -                | 20   | Gs                   |
| Shock Resistance<br>(Survival)                    | 11±1ms, 1/2 Sine Wave   | S      | -               | -                | 50   | -                | -                | 100  | Gs                   |
| Weight  |   |        | -               | 1.5              | -    | -                | 1.5              | -    | grams                |

<sup>(1)</sup> Refer to life graphs

<sup>(2)</sup> Use caution not to exceed vibration resistance limits while ultrasonically cleaning relays with DYAD switches. Contact SRC Devices Engineering for more details/recommendations.

# DIP 14 SERIES REED RELAYS



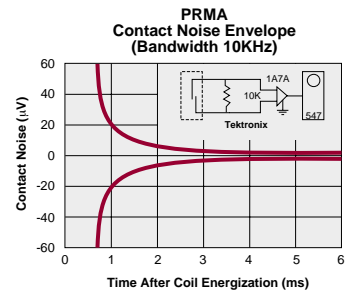
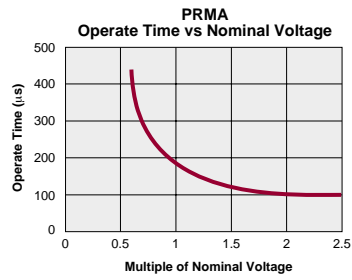
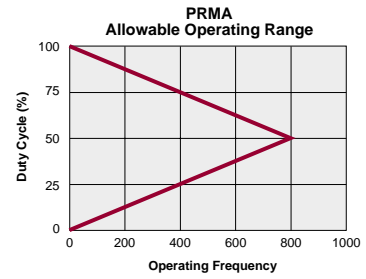
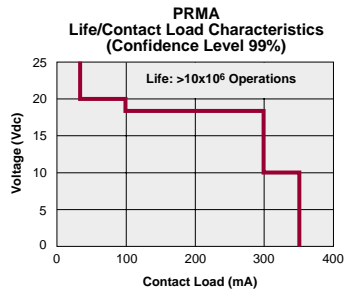
## PRMA

### COIL SPECIFICATIONS

|                  | Contact Form    | Coil Voltage |          |           | Coil Resistance |            |            | Operate Voltage        |     |             | Release Voltage        |     |     | Nominal Input Power |     |           |
|------------------|-----------------|--------------|----------|-----------|-----------------|------------|------------|------------------------|-----|-------------|------------------------|-----|-----|---------------------|-----|-----------|
| Units            |                 | Volts        |          |           | Ω               |            |            | Volts                  |     |             | Volt                   |     |     | mW                  |     |           |
| Conditions       |                 |              |          |           | +/- 10% (25°C)  |            |            | Must operate by (25°C) |     |             | Must release by (25°C) |     |     |                     |     |           |
| Part #           |                 | Min          | Typ      | Max       | Min             | Typ        | Max        | Min                    | Typ | Max         | Min                    | Typ | Max | Min                 | Typ | Max       |
| MSS2 1A05        | 1-Form-A        |              | 5        | 11        | 126             | 140        | 154        |                        |     | 3.75        | 0.5                    |     |     |                     |     | 179       |
| MSS2 1A12        | 1-Form-A        |              | 12       | 21        | 450             | 500        | 550        |                        |     | 9           | 1                      |     |     |                     |     | 288       |
| MSS2 1A24        | 1-Form-A        |              | 24       | 44        | 1935            | 2150       | 2365       |                        |     | 18          | 2                      |     |     |                     |     | 268       |
| MSS7 1A05        | 1-Form-A        |              | 5        | 11        | 126             | 140        | 154        |                        |     | 3.75        | 0.5                    |     |     |                     |     | 179       |
| MSS7 1A12        | 1-Form-A        |              | 12       | 21        | 450             | 500        | 550        |                        |     | 9           | 1                      |     |     |                     |     | 288       |
| MSS7 1A24        | 1-Form-A        |              | 24       | 43        | 1935            | 2150       | 2365       |                        |     | 18          | 2                      |     |     |                     |     | 268       |
| <b>PRMA 1A05</b> | <b>1-Form-A</b> |              | <b>5</b> | <b>21</b> | <b>450</b>      | <b>500</b> | <b>550</b> |                        |     | <b>3.75</b> | <b>0.8</b>             |     |     |                     |     | <b>50</b> |
| PRMA 1A12        | 1-Form-A        |              | 12       | 30        | 900             | 1000       | 1100       |                        |     | 9           | 1                      |     |     |                     |     | 144       |
| PRMA 1A24        | 1-Form-A        |              | 24       | 44        | 1935            | 2150       | 2365       |                        |     | 18          | 2                      |     |     |                     |     | 268       |
| PRMA 1B05        | 1-Form-B        |              | 5        | 6         | 450             | 500        | 550        |                        |     | 3.75        | 0.8                    |     |     |                     |     | 50        |
| PRMA 1B12        | 1-Form-B        |              | 12       | 14.5      | 900             | 1000       | 1100       |                        |     | 9           | 1                      |     |     |                     |     | 144       |
| PRMA 1B24        | 1-Form-B        |              | 24       | 29        | 1935            | 2150       | 2365       |                        |     | 18          | 2                      |     |     |                     |     | 268       |
| PRMA 1C05        | 1-Form-C        |              | 5        | 12        | 180             | 200        | 220        |                        |     | 3.75        | 0.8                    |     |     |                     |     | 125       |
| PRMA 1C12        | 1-Form-C        |              | 12       | 18        | 450             | 500        | 550        |                        |     | 9           | 1                      |     |     |                     |     | 288       |
| PRMA 1C24        | 1-Form-C        |              | 24       | 32        | 1935            | 2150       | 2365       |                        |     | 18          | 2                      |     |     |                     |     | 268       |
| PRMA 2A05        | 2-Form-A        |              | 5        | 11        | 126             | 140        | 154        |                        |     | 3.75        | 0.8                    |     |     |                     |     | 179       |
| PRMA 2A12        | 2-Form-A        |              | 12       | 21        | 450             | 500        | 550        |                        |     | 9           | 1                      |     |     |                     |     | 288       |
| PRMA 2A24        | 2-Form-A        |              | 24       | 44        | 1935            | 2150       | 2365       |                        |     | 18          | 2                      |     |     |                     |     | 268       |
| PRMA 10037       | 1-Form-A        |              | 5        | 15        | 342             | 380        | 418        |                        |     | 3.75        | 0.8                    |     |     |                     |     | 66        |
| PRMA 10038       | 1-Form-A        |              | 12       | 19        | 477             | 530        | 583        |                        |     | 9           | 1                      |     |     |                     |     | 272       |
| PRMA 10039       | 1-Form-A        |              | 24       | 32        | 1800            | 2000       | 2200       |                        |     | 18          | 2                      |     |     |                     |     | 288       |
| DSS7 1A05        | 1-Form-A        |              | 5        | 21        | 450             | 500        | 550        |                        |     | 3.75        | 0.8                    |     |     |                     |     | 50        |
| DSS7 1A12        | 1-Form-A        |              | 12       | 30        | 900             | 1000       | 1100       |                        |     | 9           | 1                      |     |     |                     |     | 144       |
| DSS7 1A24        | 1-Form-A        |              | 24       | 44        | 1935            | 2150       | 2365       |                        |     | 18          | 2                      |     |     |                     |     | 268       |
| PRME 25005       | 1-Form-A        |              | 5        | 19        | 450             | 500        | 550        |                        |     | 3.8         | 0.8                    |     |     |                     |     | 50        |
| PRME 15005       | 1-Form-A        |              | 5        | 15        | 342             | 380        | 418        |                        |     | 3.5         | 1                      |     |     |                     |     | 66        |
| PRME 15002       | 1-Form-A        |              | 12       | 19        | 477             | 530        | 583        |                        |     | 8           | 1                      |     |     |                     |     | 272       |
| PRME 15003       | 1-Form-A        |              | 24       | 32        | 1800            | 2000       | 2200       |                        |     | 16          | 2                      |     |     |                     |     | 288       |
| MVS2 1A05(A,B)   | 1-Form-A        |              | 5        | 7         | 94.5            | 105        | 116        |                        |     | 3.75        | 0.5                    |     |     |                     |     | 238       |
| MVS2 1A12(A,B)   | 1-Form-A        |              | 12       | 15        | 450             | 500        | 550        |                        |     | 9           | 1                      |     |     |                     |     | 288       |
| MVS2 1A24(A,B)   | 1-Form-A        |              | 24       | 30        | 1935            | 2150       | 2365       |                        |     | 18          | 2                      |     |     |                     |     | 268       |
| MVS7 1A05(S)     | 1-Form-A        |              | 5        | 7         | 94.5            | 105        | 116        |                        |     | 3.75        | 0.5                    |     |     |                     |     | 238       |
| MVS7 1A12(S)     | 1-Form-A        |              | 12       | 15        | 450             | 500        | 550        |                        |     | 9           | 1                      |     |     |                     |     | 288       |
| MVS7 1A24(S)     | 1-Form-A        |              | 24       | 30        | 1935            | 2150       | 2365       |                        |     | 18          | 2                      |     |     |                     |     | 268       |

### PRMA

### PERFORMANCE GRAPHS



# DIP 14 SERIES REED RELAYS

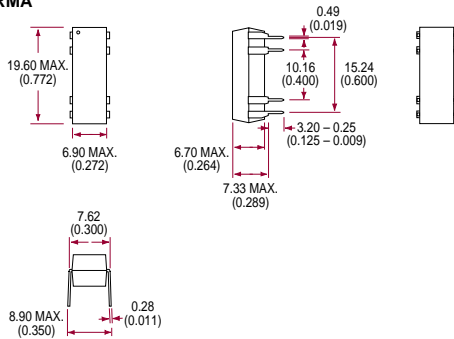


## PRMA

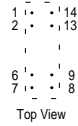
DIMENSIONS  
mm  
(inches)

## MECHANICAL DIMENSIONS

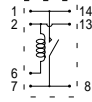
### PRMA



### PRMA 1A



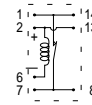
Top View



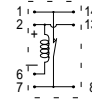
Top View

Options:  
Diode - pin #2 is positive  
Electrostatic shield - pin 9

### PRMA 1B



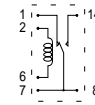
Top View



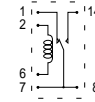
Top View

Options:  
Diode - pin #2 is positive  
Electrostatic shield - pin 9

### PRMA 1C



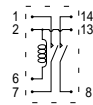
Top View



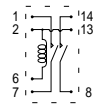
Top View

Options:  
Diode - pin #2 is positive  
Electrostatic shield - pin 9

### PRMA 2A

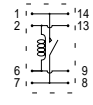


Top View

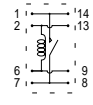


Options:  
Diode - pin #2 is positive  
Electrostatic shield - pin 9

### PRMA 10037/10038/10039

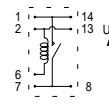


Top View

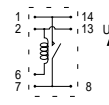


Options:  
Diode - pin #2 is positive  
Electrostatic shield - pin 9

### MVS2/MSS2



Top View



\* MVS2 only must be mounted vertically with pin #1 UP.