

# OPTO 22: SOLID STATE RELAY

## Model:MP240D4-17



### Specification:

|                                                                                                                                                                                                                                           | MP120D2<br>or P120D2                 | MP120D4<br>or P120D4                   | MP240D2<br>or P240D2                  | MP240D4<br>or P240D4                    | MP380D4                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|----------------------------------------|---------------------------------------|-----------------------------------------|-----------------------------------------|
| Nominal AC Line Voltage                                                                                                                                                                                                                   | 120                                  | 120                                    | 240                                   | 240                                     | 380                                     |
| Nominal Current Rating Amps                                                                                                                                                                                                               | 2                                    | 4                                      | 2                                     | 4                                       | 4                                       |
| 1 cycle Surge (Amps) Peak                                                                                                                                                                                                                 | 20                                   | 85                                     | 20                                    | 85                                      | 85                                      |
| Nominal Signal Input Resistance (Ohms)                                                                                                                                                                                                    | 1000                                 | 1000                                   | 1000                                  | 1000                                    | 1000                                    |
| Signal Pick-up Voltage                                                                                                                                                                                                                    | 3VDC***<br>(24V allowed)             | 3VDC***<br>(24V allowed)               | 3VDC***<br>(24V allowed)              | 3VDC***<br>(24V allowed)                | 3VDC***<br>(24V allowed)                |
| Signal Drop-out Voltage                                                                                                                                                                                                                   | 1 VDC                                | 1 VDC                                  | 1 VDC                                 | 1 VDC                                   | 1 VDC                                   |
| Peak Repetitive Voltage Maximum                                                                                                                                                                                                           | 600                                  | 600                                    | 600                                   | 600                                     | 800                                     |
| Maximum Output Voltage Drop                                                                                                                                                                                                               | 1.6 volts                            | 1.6 volts                              | 1.6 volts                             | 1.6 volts                               | 1.6 volts                               |
| Off-State Leakage mA Maximum**                                                                                                                                                                                                            | 5 mA                                 | 5 mA                                   | 5 mA                                  | 5 mA                                    | 5 mA                                    |
| Operating Voltage Range (Volts AC)                                                                                                                                                                                                        | 12–140                               | 12–140                                 | 24–280                                | 24–280                                  | 24–420                                  |
| I <sup>2</sup> t Rating t=8.3 (ms)                                                                                                                                                                                                        | 2                                    | 30                                     | 2                                     | 30                                      | 30                                      |
| Isolation Voltage                                                                                                                                                                                                                         | 4,000 V <sub>RMS</sub>               | 4,000 V <sub>RMS</sub>                 | 4,000 V <sub>RMS</sub>                | 4,000 V <sub>RMS</sub>                  | 4,000 V <sub>RMS</sub>                  |
| θ <sub>jc</sub> * °C/Watt                                                                                                                                                                                                                 | 20                                   | 6.5                                    | 20                                    | 6.5                                     | 6.5                                     |
| Dissipation Watts/Amp                                                                                                                                                                                                                     | 1.2                                  | 1.2                                    | 1.2                                   | 1.2                                     | 1.2                                     |
| Rating (Motor Load)                                                                                                                                                                                                                       | 1 FLA at 120 VAC<br>6 LRA at 120 VAC | 2.5 FLA at 240 VAC<br>6 LRA at 240 VAC | 1 FLA at 120 VAC<br>15 LRA at 120 VAC | 2.5 FLA at 240 VAC<br>15 LRA at 240 VAC | 2.5 FLA at 380 VAC<br>15 LRA at 380 VAC |
| Notes: θ <sub>jc</sub> * = Thermal resistance junction to base. Maximum junction temperature is 110 °C.<br>** Operating Frequency: 25 to 65 Hz (operates at 400 Hz with 6 times the offstate leakage)<br>*** = P Series 32 volts maximum. |                                      |                                        |                                       |                                         |                                         |