

**SMD15PL THRU SMD1200PL****1 Amp Schottky Rectifier****Features**

- Schottky Barrier Rectifier
- High Current Capability
- Low Forward Voltage
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

**Maximum Ratings**

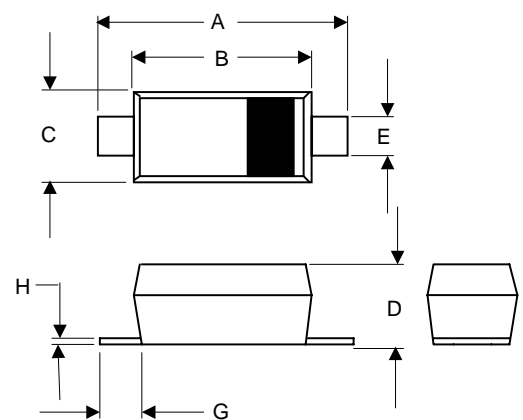
- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 28°C/W Junction To Lead

| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|--|---------------------|-----------------------------|
| SMD15PL            | D5             | 50V                                    | 35V                 | 50V                         |
| SMD16PL            | D6             | 60V                                    | 42V                 | 60V                         |
| SMD18PL            | D8             | 80V                                    | 56V                 | 80V                         |
| SMD110PL           | D10            | 100V                                   | 70V                 | 100V                        |
| SMD1150PL          | D15            | 150V                                   | 105V                | 150V                        |
| SMD1200PL          | D20            | 200V                                   | 140V                | 200V                        |

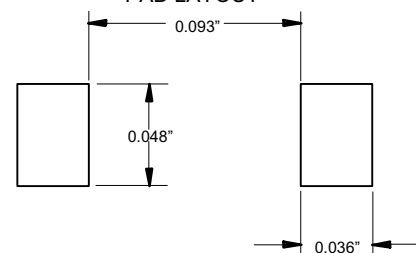
**Electrical Characteristics @ 25°C Unless Otherwise Specified**

|  |             |                      |  |
|--|-------------|----------------------|--|
| Average Forward Current  | $I_{F(AV)}$ | 1.0A                 | $T_L = 90^\circ\text{C}$   |
| Peak Forward Surge Current   | $I_{FSM}$   | 30A                  | 8.3ms, half sine   |
| Maximum Instantaneous Forward Voltage<br>SMD15PL-16PL<br>SMD18PL-1150PL<br>SMD1200PL | $V_F$       | .70V<br>.85V<br>.95V | $I_{FM} = 1.0\text{A};$<br>$T_J = 25^\circ\text{C}(\text{Note:2})$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage                              | $I_R$       | 0.5mA<br>20mA        | $T_A = 25^\circ\text{C}$<br>$T_A = 100^\circ\text{C}$              |
| Typical Junction Capacitance<br>SMD12PL -16PL<br>SMD18PL-1150PL                      | $C_J$       | 110pF<br>30pF        | Measured at<br>1.0MHz, $V_R=4.0\text{V}$                           |

Note:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.  
2.Pulse test: Pulse width 300 sec, Duty cycle 2%

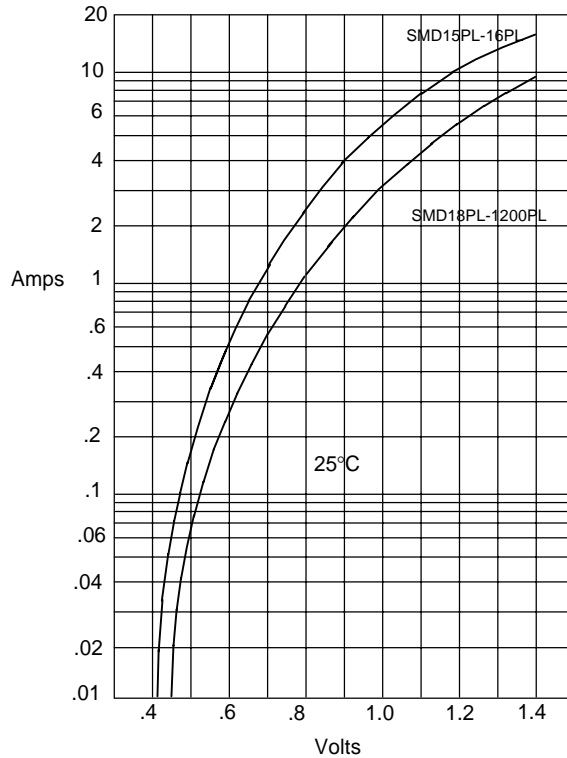
**1 Amp Schottky Rectifier  
50 to 200 Volts****SOD-123FL**

| DIM | DIMENSIONS |       |      |       | NOTE |
|-----|------------|-------|------|-------|------|
|     | INCHES     |       | MM   |       |      |
|     | MIN        | MAX   | MIN  | MAX   |      |
| A   | .140       | .152  | 3.55 | 3.85  |      |
| B   | .100       | .112  | 2.55 | 2.85  |      |
| C   | .055       | .071  | 1.40 | 1.80  |      |
| D   | .037       | .053  | 0.95 | 1.35  |      |
| E   | .020       | .039  | 0.50 | 1.00  |      |
| G   | .010       | ----- | 0.25 | ----- |      |
| H   | -----      | .008  | ---- | .20   |      |

**SUGGESTED SOLDER PAD LAYOUT**

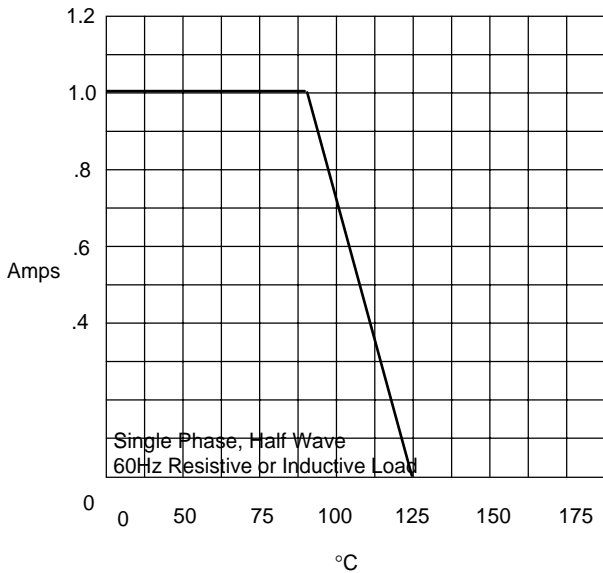
# SMD15PL thru SMD1200PL

Figure 1  
Typical Forward Characteristics



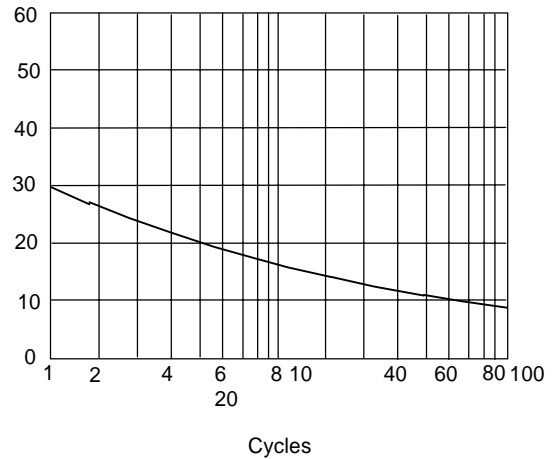
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*  
Lead Temperature - °C

Figure 3  
Peak Forward Surge Current



Number Of Cycles At 60Hz - Cycles