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## R1200F THRU R2000F

### Features

- Low Cost
- Low Leakage
- Low Forward Voltage Drop
- High Current Capability
- High Voltage
- Fast Switching For Higher Efficiency

### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

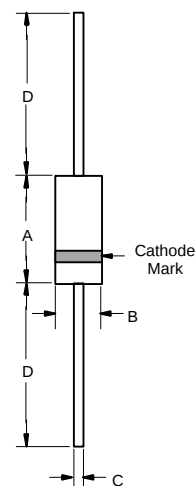
| Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|----------------|----------------|----------------------------------------|---------------------|-----------------------------|
| R1200F         | ---            | 1200V                                  | 840V                | 1200V                       |
| R1500F         | ---            | 1500V                                  | 1050V               | 1500V                       |
| R1800F         | ---            | 1800V                                  | 1260V               | 1800V                       |
| R2000F         | ---            | 2000V                                  | 1400V               | 2000V                       |

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

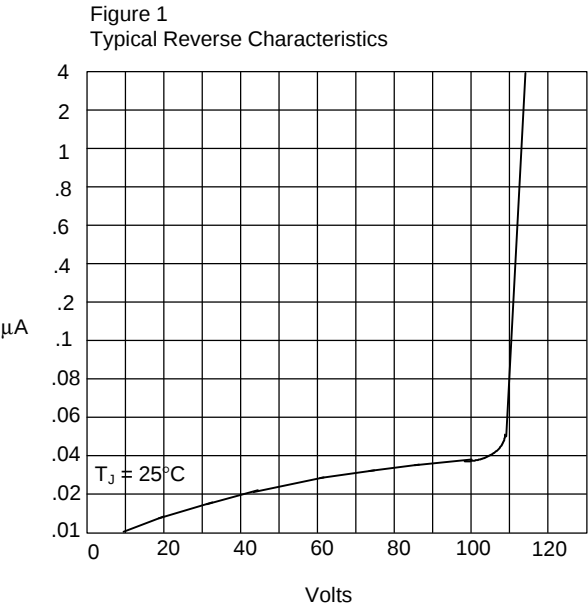
|                                                                  |             |               |                                                       |
|------------------------------------------------------------------|-------------|---------------|-------------------------------------------------------|
| Average Forward Current                                          | $I_{F(AV)}$ | 500mA         | $T_A = 50^\circ\text{C}$                              |
| Peak Forward Surge Current                                       | $I_{FSM}$   | 30A           | 8.3ms, half sine                                      |
| Maximum Instantaneous Forward Voltage<br>R1200F-R1800F<br>R2000F | $V_F$       | 2.4V<br>4.0V  | $I_{FM} = 0.5\text{A};$<br>$T_A = 50^\circ\text{C}$   |
| Maximum DC Reverse Current At Rated DC Blocking Voltage          | $I_R$       | 5.0μA<br>50μA | $T_A = 25^\circ\text{C}$<br>$T_A = 100^\circ\text{C}$ |
| Typical Junction Capacitance                                     | $C_J$       | 30pF          | Measured at 1.0MHz, $V_R=4.0\text{V}$                 |
| Maximum Reverse Recovery Time                                    | $T_{rr}$    | 500nS         |                                                       |

### 500 Milliamp High Voltage Fast Recovery Silicon Rectifier 1200 to 2000 Volts

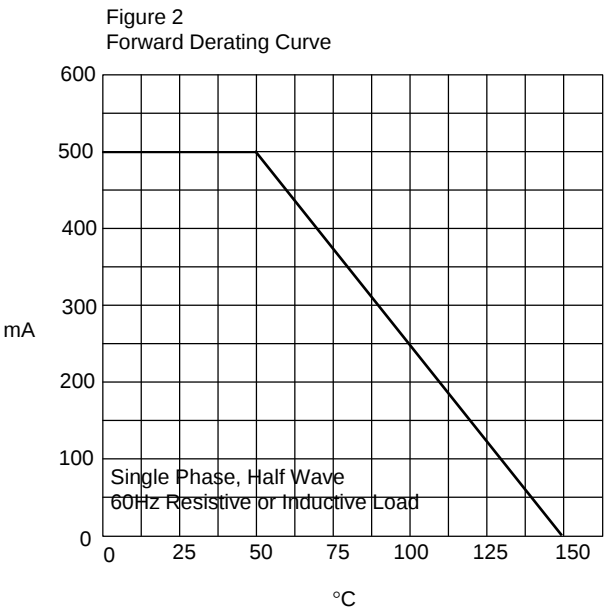
#### DO-41



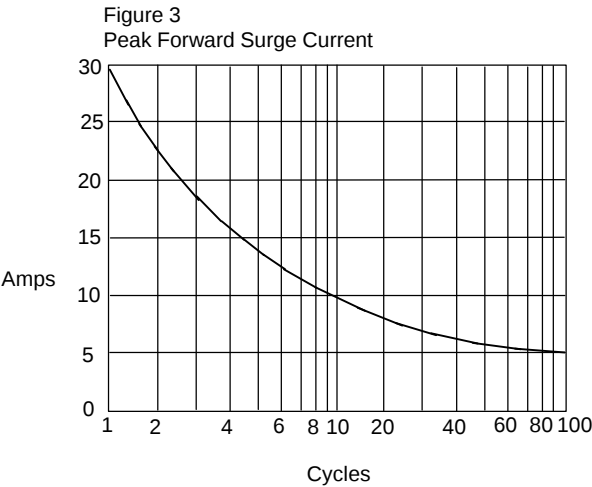
| DIMENSIONS |        |      |       |      |      |
|------------|--------|------|-------|------|------|
| DIM        | INCHES |      | MM    |      | NOTE |
|            | MIN    | MAX  | MIN   | MAX  |      |
| A          | .166   | .205 | 4.10  | 5.20 |      |
| B          | .080   | .107 | 2.00  | 2.70 |      |
| C          | .028   | .034 | .70   | .90  |      |
| D          | 1.000  | ---  | 25.40 | ---  |      |



Instantaneous Reverse Current - Micro Amperes *versus*  
Percent Of Rated Peak Reverse Voltage - Volts



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



Peak Forward Surge Current - Amperes *versus*  
Number Of Cycles At 60Hz - Cycles