



**SCHOTTKY DIODES MODULE TYPE 100A**

**Features**

- High Surge Capability
- Types Up to 100V  $V_{RRM}$
- Isolated to Plate

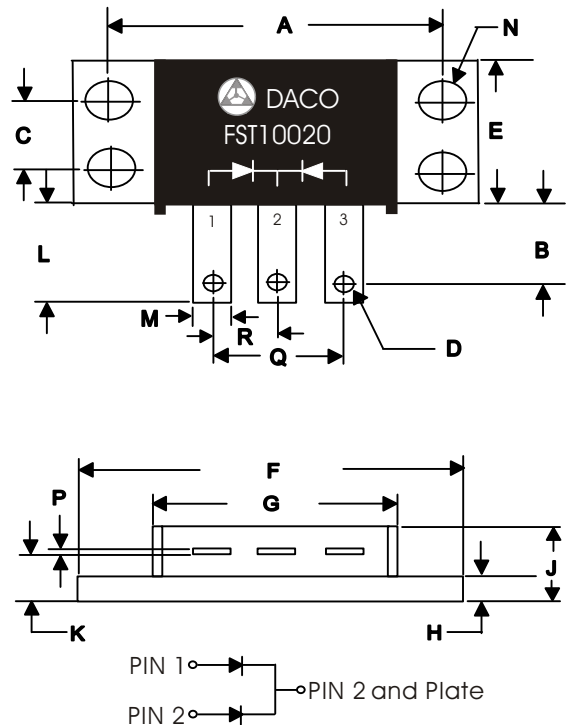
**100Amp Rectifier  
20-100 Volts**

**Maximum Ratings**

Operating Temperature:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$   
Storage Temperature:  $-40^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$

| Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-------------|--|---------------------|-----------------------------|
| FST10020    | 20V                                    | 14V                 | 20V                         |
| FST10030    | 30V                                    | 21V                 | 30V                         |
| FST10035    | 35V                                    | 25V                 | 35V                         |
| FST10040    | 40V                                    | 28V                 | 40V                         |
| FST10045    | 45V                                    | 32V                 | 45V                         |
| FST10060    | 60V                                    | 42V                 | 60V                         |
| FST10080    | 80V                                    | 56V                 | 80V                         |
| FST100100   | 100V                                   | 70V                 | 100V                        |

**POWER MOD  
TO-249**



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

|   |                 |                         |   |
|---|-----------------|-------------------------|---|
| Average Forward Current (Per Pkg)   | $I_{F(AV)}$     | 100A                    | $T_C = 100^{\circ}\text{C}$   |
| Peak Forward Surge Current (Per leg)  | $I_{FSM}$       | 1000A                   | 8.3ms, half sine  |
| Maximum Instantaneous Forward Voltage (Per leg) NOTE (1)                              | $V_F$           | 0.65V<br>0.75V<br>0.84V | (FST10020~FST10045)<br>(FST10060)<br>(FST10080~FST100100)<br>$I_{FM} = 50A; T_J = 25^{\circ}\text{C}$ |
| Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg) NOTE (1) | $I_R$           | 2 mA<br>600 mA          | $T_J = 25^{\circ}\text{C}$<br>$T_J = 125^{\circ}\text{C}$   |
| Maximum Thermal Resistance Junction To Case (Per leg)                                 | $R_{\theta jc}$ | $1.0^{\circ}\text{C/W}$ |   |

NOTE :  
(1) Pulse Test: Pulse Width 300 usec, Duty Cycle < 2%

| DIM | INCHES |       | MM    |       | NOTE        |
|-----|--------|-------|-------|-------|-------------|
|     | MIN    | MAX   | MIN   | MAX   |             |
| A   | 1.995  | 2.005 | 50.67 | 50.93 |             |
| B   | .300   | .325  | 7.62  | 8.26  |             |
| C   | .495   | .505  | 12.57 | 12.83 |             |
| D   | .182   | .192  | 4.62  | 4.88  | $\emptyset$ |
| E   | .990   | 1.010 | 25.15 | 26.65 |             |
| F   | 2.390  | 2.410 | 60.71 | 61.21 |             |
| G   | 1.495  | 1.525 | 37.90 | 38.70 |             |
| H   | .114   | .122  | 2.90  | 3.10  |             |
| J   | ----   | 0.420 | ----  | 10.67 |             |
| K   | .240   | .260  | 6.10  | 6.60  |             |
| L   | .490   | .510  | 12.45 | 12.95 |             |
| M   | .330   | .350  | 8.38  | 8.90  |             |
| N   | .175   | .195  | 4.45  | 4.95  | $\emptyset$ |
| P   | .035   | .045  | 0.89  | 1.14  |             |
| R   | .445   | .455  | 11.30 | 11.56 |             |
| Q   | .890   | .910  | 22.61 | 23.11 |             |



Figure .1-Typical Forward Characteristics

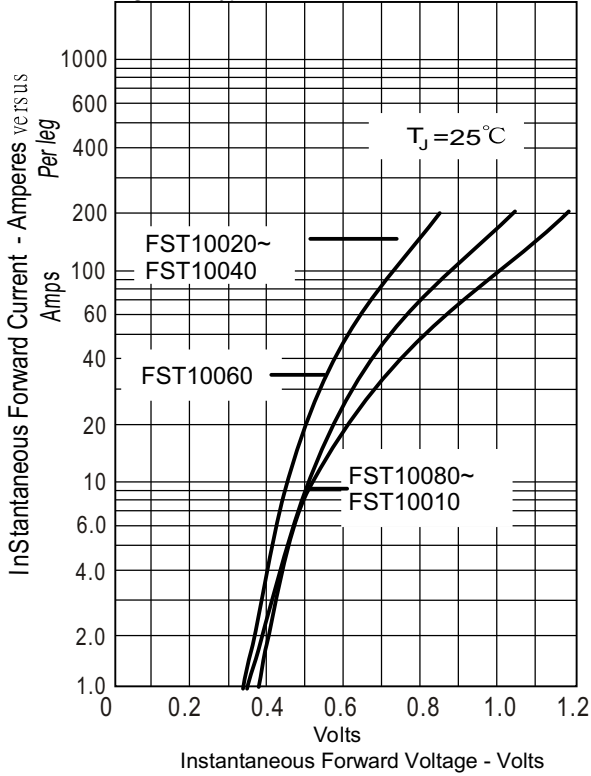


Figure .2-Forward Derating Curve

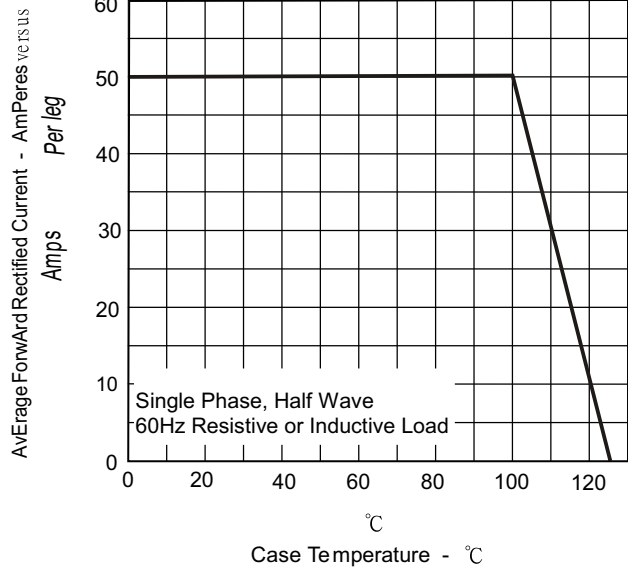


Figure .3-Peak Forward Surge Current

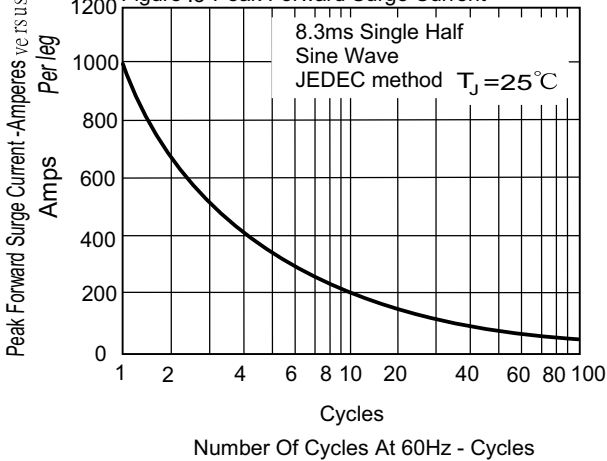


Figure .4-Typical Reverse Characteristics

