

SCHOTTKY DIODES MODULE TYPE 100A

Features

High Surge Capability
Types Up to 100V V_{RRM}

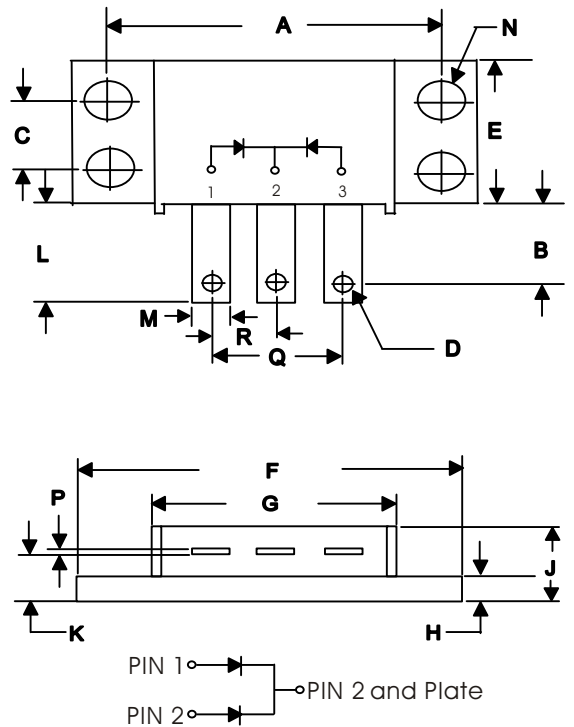
**100Amp Rectifier
20-100 Volts**

Maximum Ratings

Operating Temperature: -40°C to $+125^{\circ}\text{C}$
Storage Temperature: -40°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-249AB**



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 0.75V 0.84V | (FST10020~FST10045) (FST10060) (FST10080~FST100100) $I_{FM} = 50A; T_J = 25^{\circ}\text{C}$ |
| Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg) NOTE (1) | I_R | 2 mA 600 mA | $T_J = 25^{\circ}\text{C}$ $T_J = 125^{\circ}\text{C}$ |
| Maximum Thermal Resistance Junction To Case (Per leg) | $R_{\theta jc}$ | 1.0°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 | \varnothing |
| 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 | \varnothing |
| P | .035 | .045 | 0.89 | 1.14 | |
| R | .445 | .455 | 11.30 | 11.56 | |
| Q | .890 | .910 | 22.61 | 23.11 | |

FST10020 THRU FST100100

Figure .1-Typical Forward Characteristics

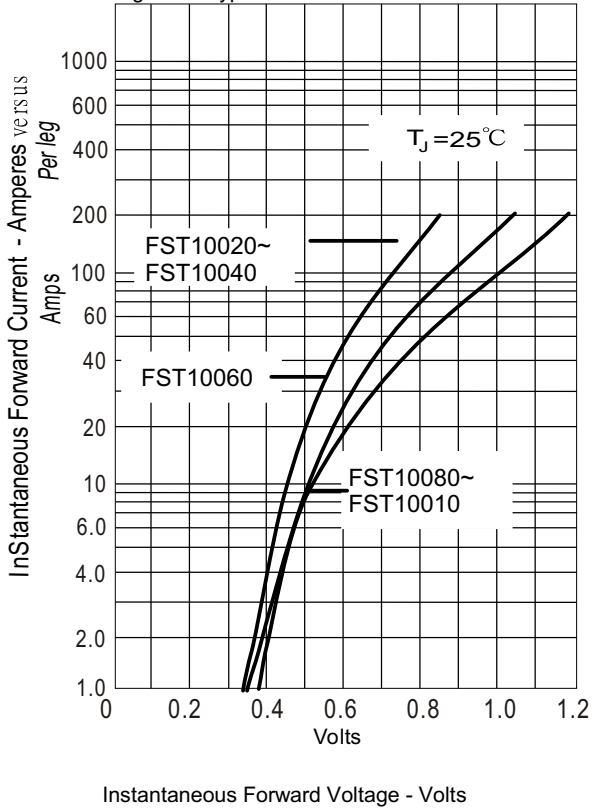


Figure .2-Forward Derating Curve

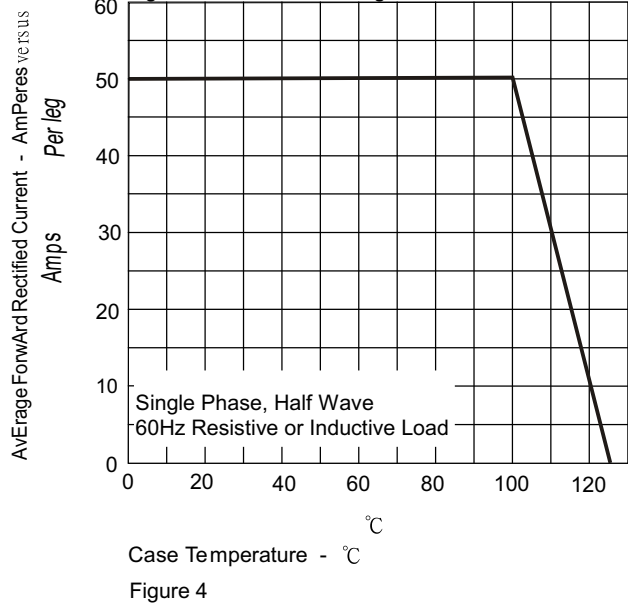


Figure .3-Peak Forward Surge Current

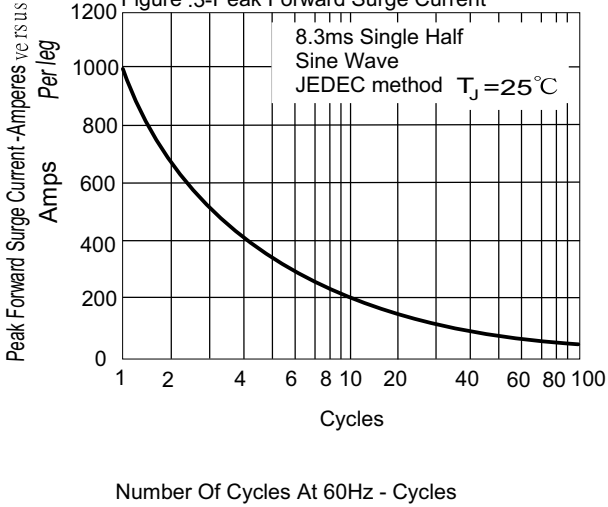


Figure .4-Typical Reverse Characteristics

