

SCHOTTKY DIODES MODULE TYPE 60A

Features

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

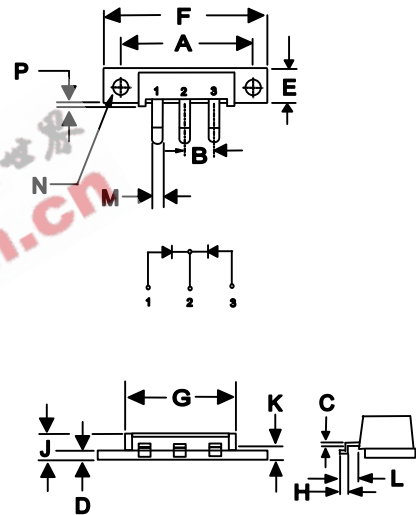
**60Amp Rectifier
10-100 Volts**

**MINI MOD
D61-3L**

Maximum Ratings

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

| Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-------------|--|---------------------|-----------------------------|
| FST6310L | 10V | 7V | 10V |
| FST6315L | 15V | 10V | 15V |
| FST6320L | 20V | 14V | 20V |
| FST6330L | 30V | 21V | 30V |
| FST6335L | 35V | 25V | 35V |
| FST6340L | 40V | 28V | 40V |
| FST6345L | 45V | 32V | 45V |
| FST6360L | 60V | 42V | 60V |
| FST6380L | 80V | 56V | 80V |
| FST63100L | 100V | 70V | 100V |



Electrical Characteristics @ 25 °C Unless Otherwise Specified

| | | | |
|---|-----------------|-------------------------|--|
| Average Forward Current (Per pkg) | $I_{F(AV)}$ | 60A | $T_C = 105^{\circ}\text{C}$ |
| Peak Forward Surge Current (Per leg) | I_{FSM} | 600A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage (Per leg) NOTE (1) | V_F | 0.55V 0.75V 0.84V | (FST6310L~FST6345L) (FST6360L) (FST6380L~FST63100L) $I_{FM} = 30\text{A}; T_j = 25^{\circ}\text{C}$ |
| Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg) NOTE (1) | I_R | 3.0 mA 500 mA | $T_j = 25^{\circ}\text{C}$ $T_j = 125^{\circ}\text{C}$ |
| Maximum Thermal Resistance Junction To Case (Per leg) | $R_{\theta jc}$ | 1.2 °C/W | |

| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|-------|-------|-------|------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | 1.180 | 1.195 | 29.97 | 30.35 | |
| B | .200 | NOM | 5.08 | NOM | 2PL |
| C | .027 | .037 | 0.69 | 0.94 | |
| D | .088 | .098 | 2.24 | 2.49 | |
| E | .350 | .370 | 8.89 | 9.40 | |
| F | 1.490 | 1.510 | 37.85 | 38.35 | |
| G | .695 | .715 | 17.65 | 18.16 | |
| H | .104 | .124 | 2.64 | 3.15 | |
| J | .240 | .260 | 6.10 | 6.60 | |
| K | .115 | .135 | 2.92 | 3.43 | |
| L | .230 | .250 | 5.84 | 6.35 | |
| M | .065 | .085 | 1.65 | 2.16 | |
| N | .151 | .161 | 3.84 | 4.09 | |
| P | .015 | .025 | 0.38 | 0.64 | |

NOTE :

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

Figure .1-Typical Forward Characteristics

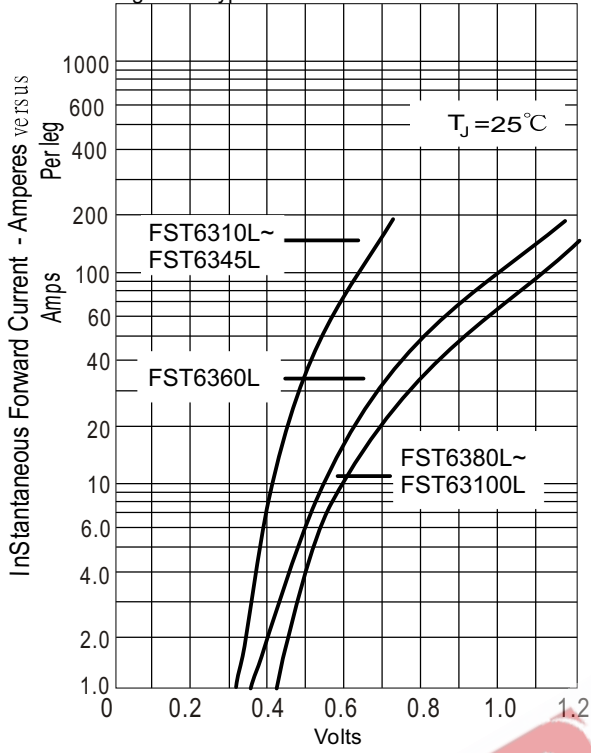
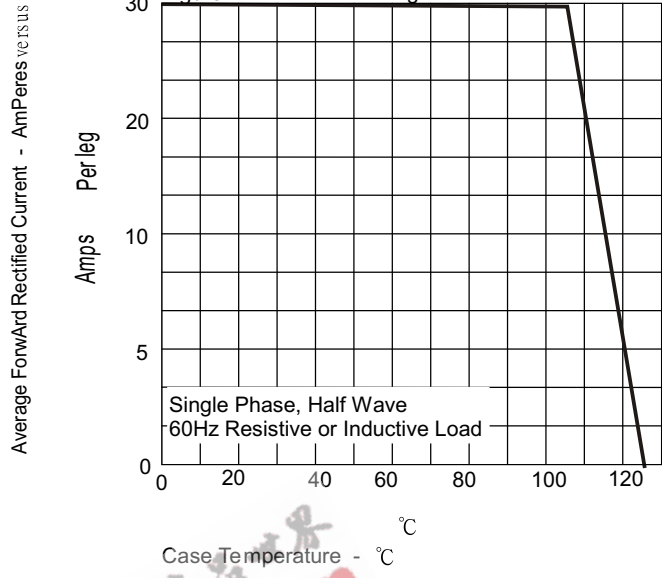


Figure .2-Forward Derating Curve



Instantaneous Forward Voltage - Volts

Figure .3-Peak Forward Surge Current

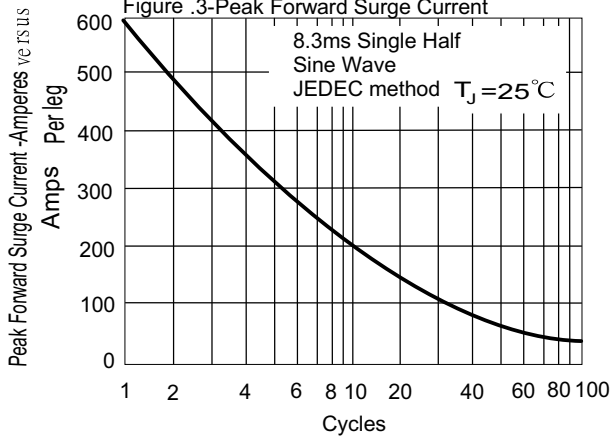
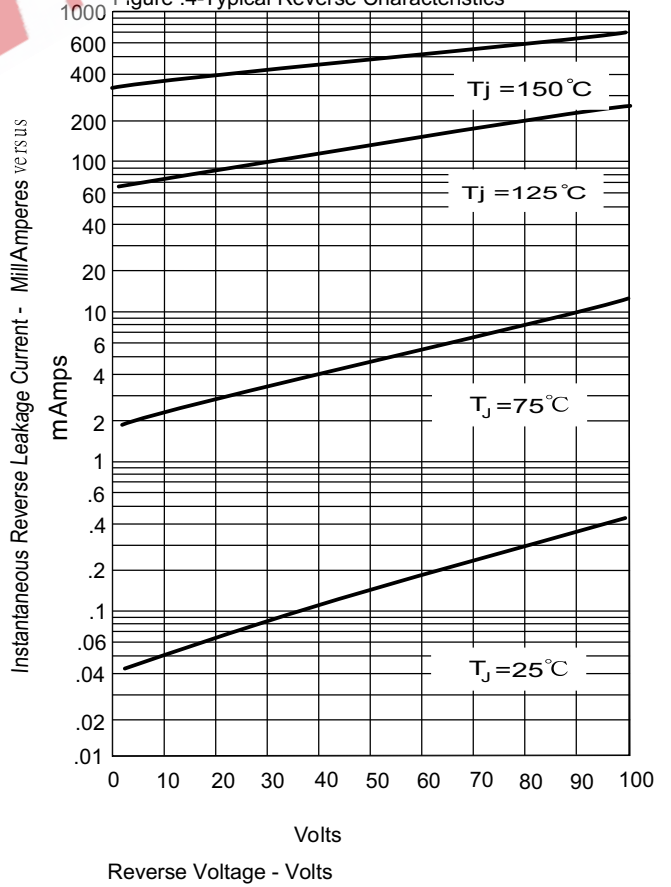


Figure .4-Typical Reverse Characteristics



Number Of Cycles At 60Hz - Cycles

Reverse Voltage - Volts