



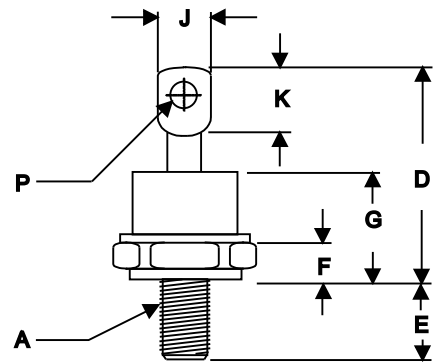
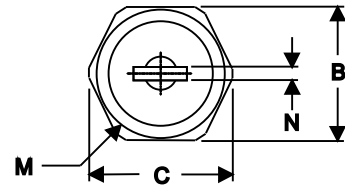
SCHOTTKY DIODES STUD TYPE 15A

Features

High Surge Capability
Types up to 40V V_{RRM}

15Amp Rectifier
20-40 Volts

DO-5



Notes:

1. Standard Polarity: Stud is Cathode
2. Reverse Polarity: Stud is Anode

Maximum Ratings

Operating Temperature: -65 °C to +150 °C

Storage Temperature: -65 °C to +175 °C

| Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-------------|--|---------------------|-----------------------------|
| 1N5826(R) | 20V | 14V | 20V |
| 1N5827(R) | 30V | 21V | 30V |
| 1N5828(R) | 40V | 28V | 40V |
| | | | |
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Electrical Characteristics @ 25 °C Unless Otherwise Specified

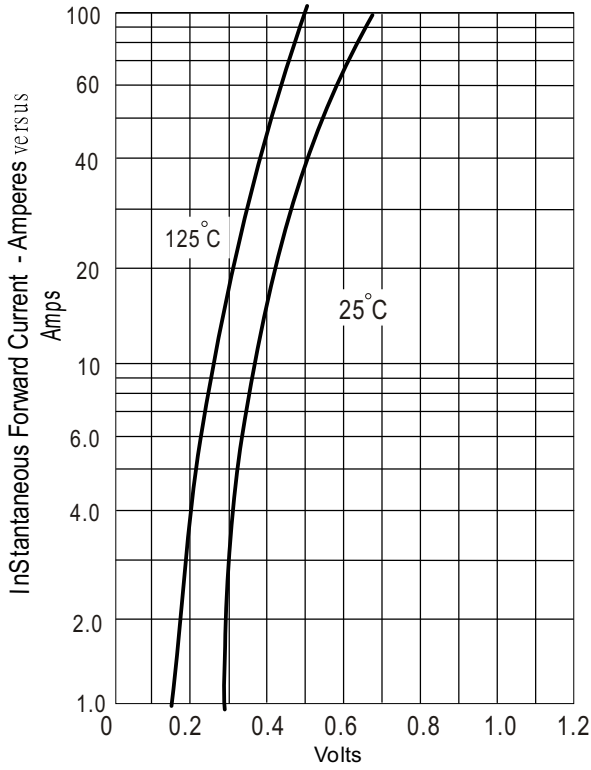
| | | | |
|--|-----------------|-------------------------|--|
| Average Forward Current | $I_{F(AV)}$ | 15A | $T_c = 100^\circ C$ |
| Peak Forward Surge Current | I_{FSM} | 500A | 8.3ms , half sine |
| Maximum Instantaneous Forward Voltage <small>NOTE (1)</small> | V_F | 0.44V 0.47V 0.50V | (1N5826) (1N5827) (1N5828) $I_{FM} = 15 A ; T_J = 25^\circ C$ |
| Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage <small>NOTE (1)</small> | I_R | 10 mA 250 mA | $T_J = 25^\circ C$ $T_J = 125^\circ C$ |
| Maximum Thermal Resistance, Junction To Case | $R_{\theta jc}$ | 1.8°C/W | |

| DIM | DIMENSIONS | | | | NOTE |
|-----|-----------------|-------|-------|-------|------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | 1/4 -28 Threads | | | | |
| B | .669 | .687 | 17.19 | 17.44 | |
| C | ---- | .794 | ---- | 20.16 | |
| D | ---- | 1.020 | ---- | 25.91 | |
| E | .422 | .453 | 10.72 | 11.50 | |
| F | .115 | .200 | 2.93 | 5.08 | |
| G | ---- | .460 | ---- | 11.68 | |
| H | ---- | ---- | ---- | ---- | |
| J | ---- | .375 | ---- | 9.52 | |
| K | .156 | ---- | 3.96 | ---- | |
| M | ---- | .667 | ---- | 16.94 | |
| N | ---- | .080 | ---- | 2.03 | |
| P | .140 | .175 | 3.56 | 4.45 | |

NOTE :

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

Figure 1
Typical Forward Characteristics



Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve

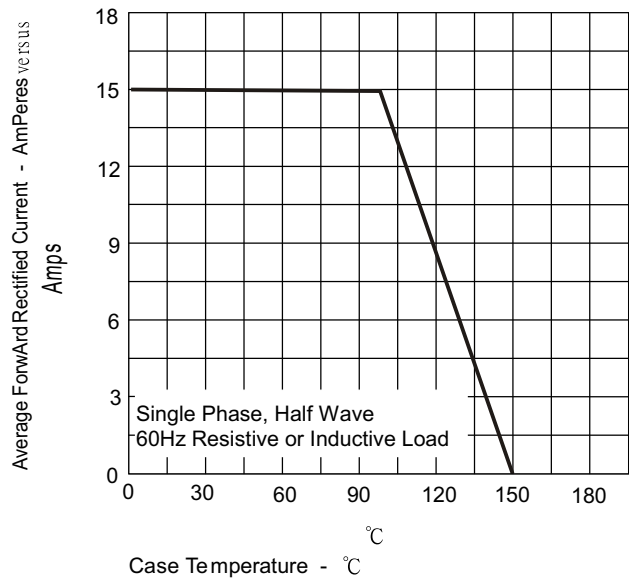


Figure 4
Typical Reverse Characteristics

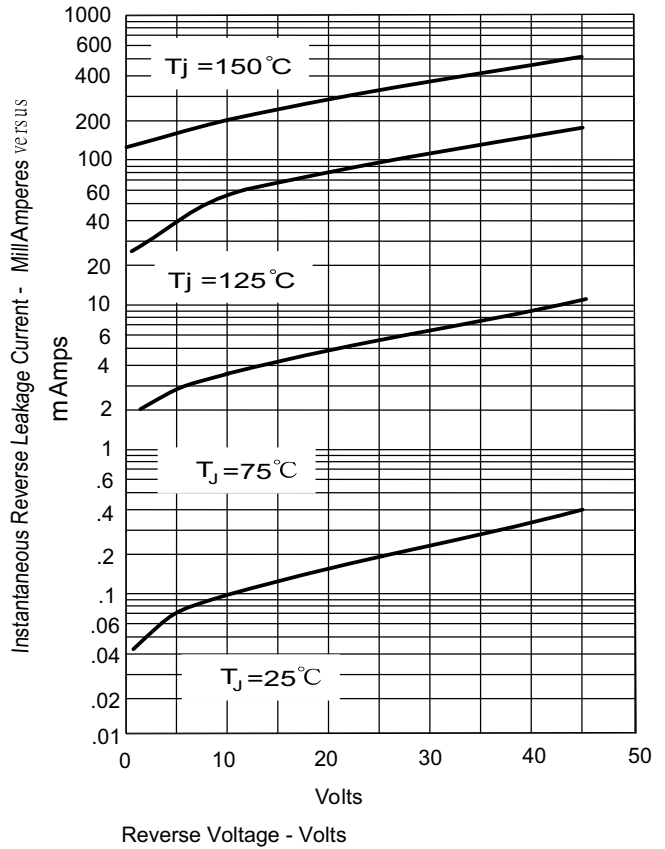
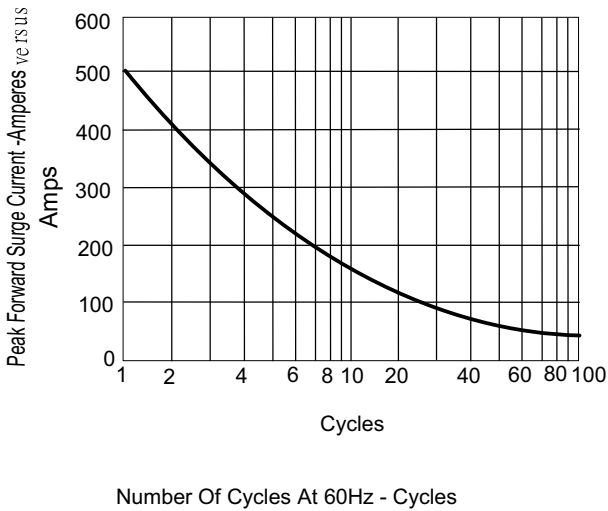


Figure 3
Peak Forward Surge Current



Number Of Cycles At 60Hz - Cycles