



SUPER FAST DIODE MODULE TYPE 300A

Features

- High Surge Capability
- Type 400V V_{RRM}
- Isolation Type Package
- Electrically Isolation base plate

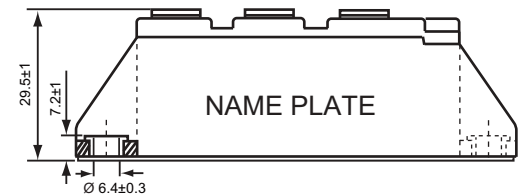
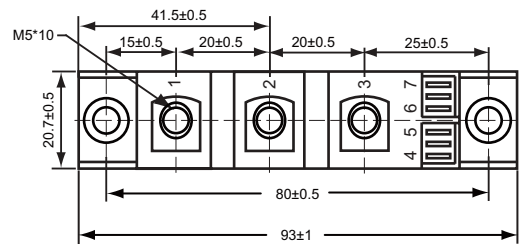
Maximum Ratings

Junction Operating Temperature : -55°C to +175°C
 Storage Temperature : -55°C to +175°C



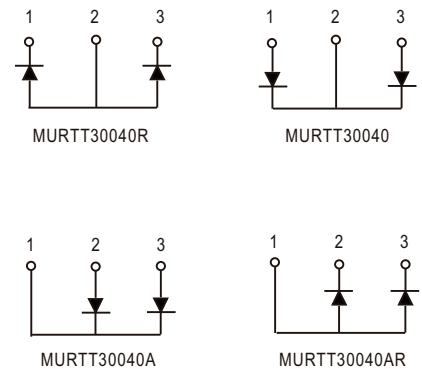
| Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|------------------|--|---------------------|-----------------------------|
| MURTT30040(A)(R) | 400V | 280V | 400V |

Dimensions in mm (1 mm = 0.0394")



Electrical Characteristics @ 25 °C Unless Otherwise Specified

| | | | |
|--|-----------------|------------------------|--|
| Average Forward Current (Per pkg) | $I_{F(AV)}$ | 300A | $T_C = 125^\circ C$ |
| Peak Forward Surge Current (Per diode) | I_{FSM} | 2750A | 8.3ms , half sine |
| Maximum Instantaneous Forward Voltage* (Per diode) | V_F | 1.3V | $I_{FM}=150A; T_J = 25^\circ C$ |
| Maximum Instantaneous Reverse Current At Rated DC Blockig Voltage* (Per diode) | I_R | 25µA 3mA | $T_J = 25^\circ C$ $T_J = 125^\circ C$ |
| Maximum Reverse Recovery Time (Per diode) | T_{rr} | 100ns | $I_F = 0.5A, I_R = 1.0A$ $I_{RR} = 0.25A$ |
| Isolation Voltage | V_{iso} | 2500V | A.C. 1 minute |
| Maximum Thermal Resistance Junction To Case (Per diode) | $R_{\theta jc}$ | 0.40°C/W | |
| Mounting torque | | 4 ± 0.5Nm 3 ± 0.5Nm | to heatsink to terminal |



*Pulse Test: Pulse Width 300µsec, Duty Cycle < 2%



Figure .1- Typical Forward Characteristics

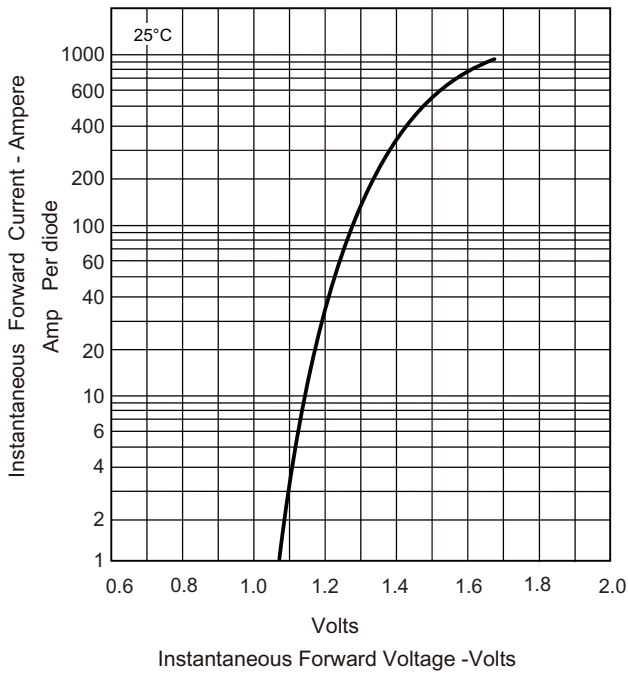


Figure .2-Forward Derating Curve

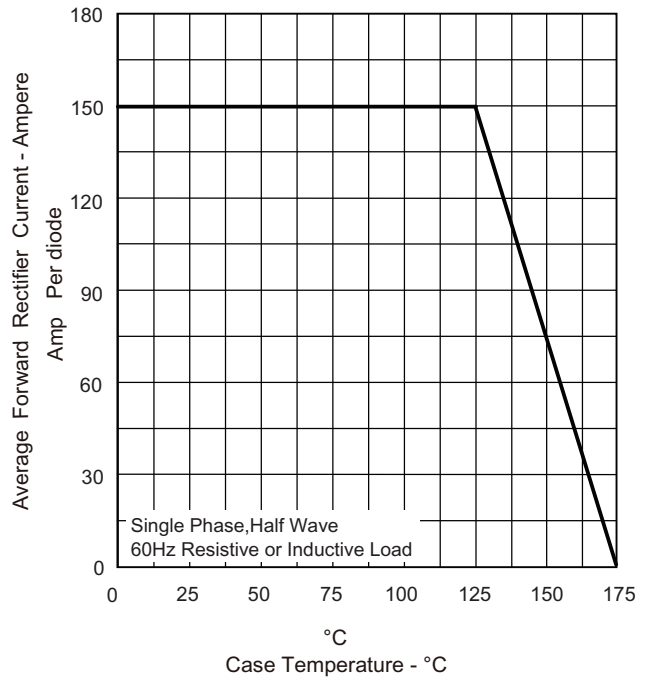


Figure .3-Peak Forward Surge Current

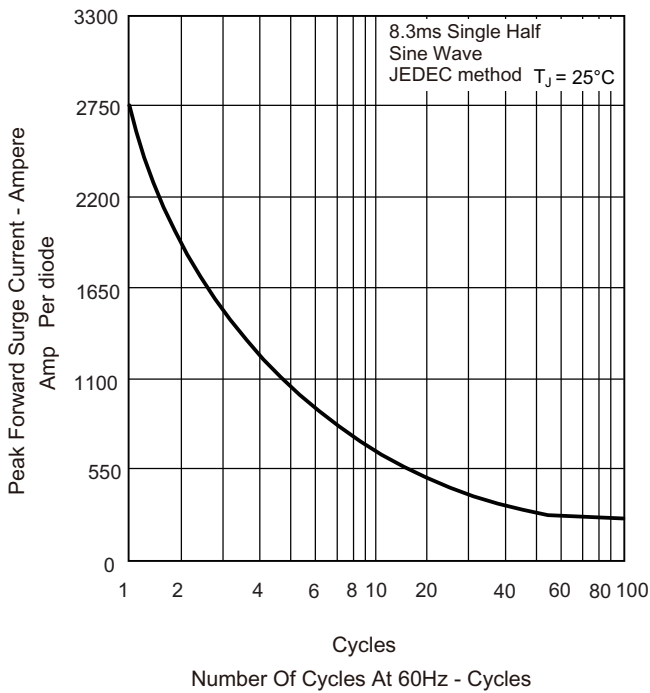
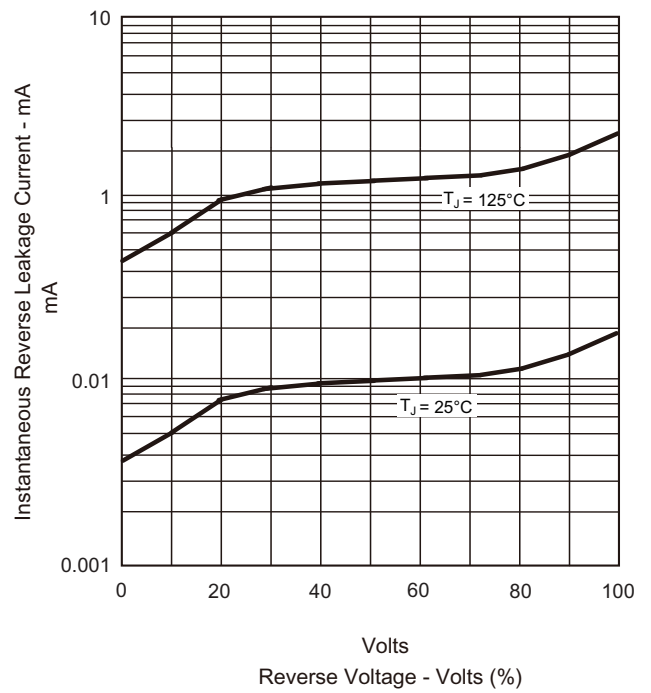


Figure .4 -Typical Reverse Characteristics





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