



SCHOTTKY DIODE MODULE TYPE 300A

Features

High Surge Capability
Type 150V V_{RRM}

Maximum Ratings

Operating Temperature : -55°C to +150°C
Storage Temperature : -55°C to +150°C

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRQ302150CT(R)	150V	105V	150V

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 leg)	I_{FSM}	2000A	8.3ms , half sine
Maximum Instantaneous Forward Voltage* (Per leg)	V_F	0.80V 0.88V	$I_{FM}=150A; T_J = 125^\circ C$ $I_{FM}=150A; T_J = 25^\circ C$
Maximum Instantaneous Reverse Current At Rated DC Blockig Voltage* (Per leg)	I_R	3mA 10mA 50mA	$T_J = 25^\circ C$ $T_J = 100^\circ C$ $T_J = 150^\circ C$
Maximum Thermal Resistance Junction To Case (Per leg)	$R_{\theta j c}$	0.40°C/W	
Mounting torque		4 ± 0.5Nm 4 ± 0.5Nm	To heatsink To terminals
Weight		74.5g	

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

TWIN TOWER Q



Dimensions in mm (1 mm = 0.0394")

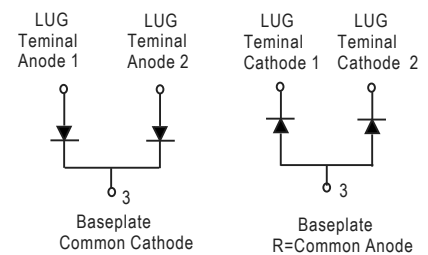
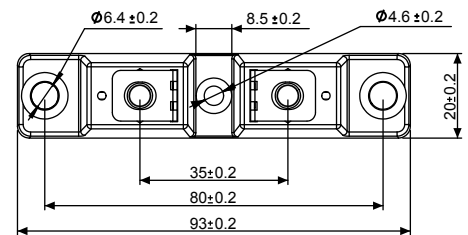
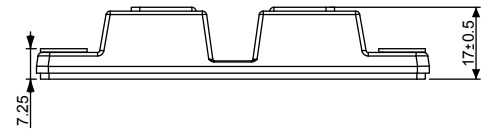




Figure .1- Typical Forward Characteristics

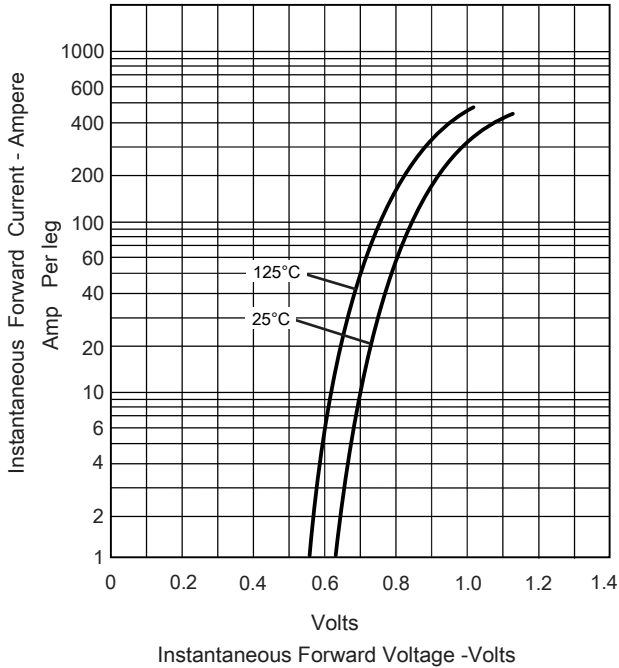


Figure .2-Forward Derating Curve

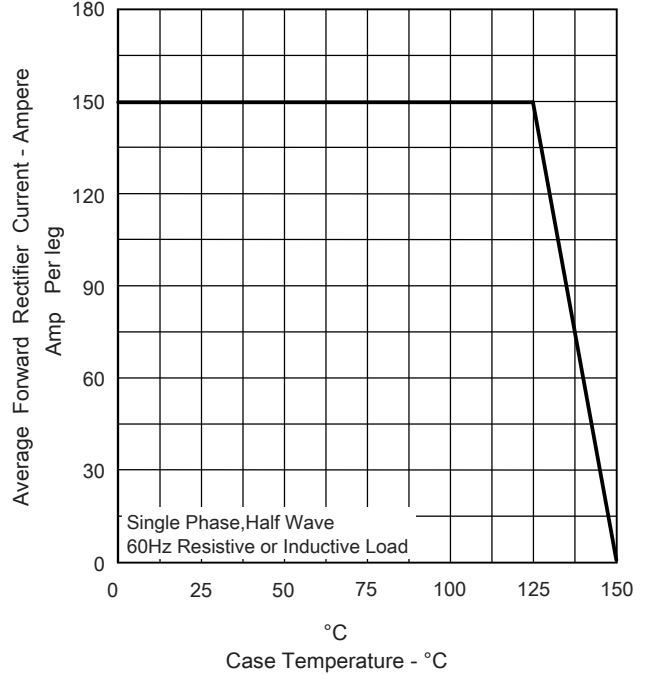


Figure .3- Peak Forward Surge Current

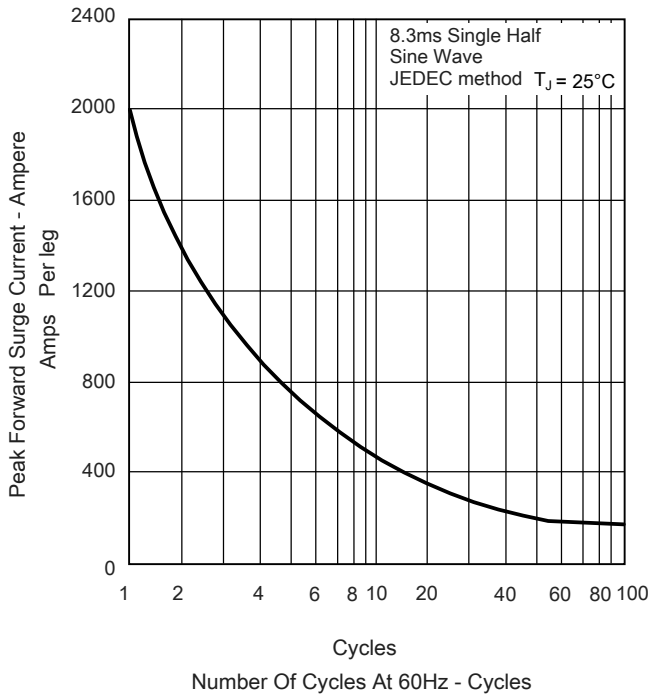
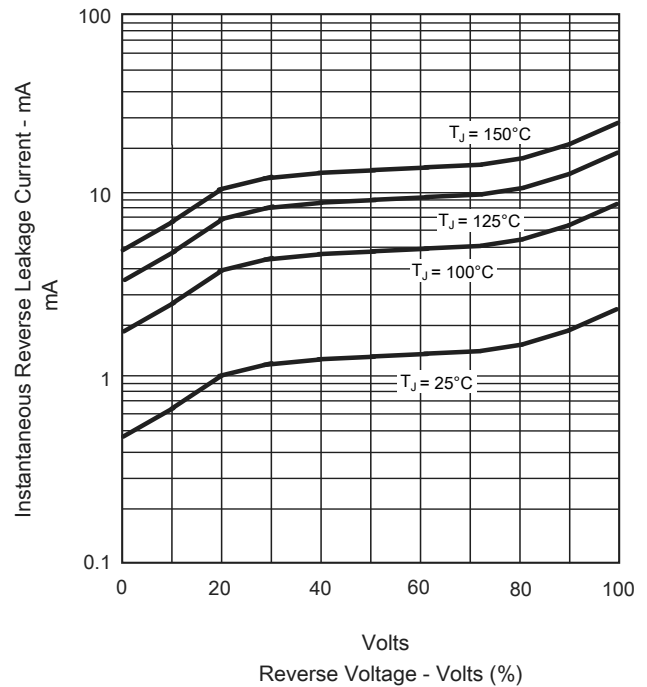


Figure .4-Typical Reverse Characteristics





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