



**SCHOTTKY DIODE MODULE TYPE
600A / 100V**

Features

High Surge Capability
Type 100V V_{RRM}

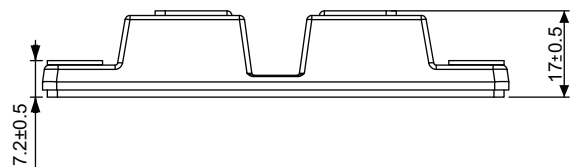
Maximum Ratings

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



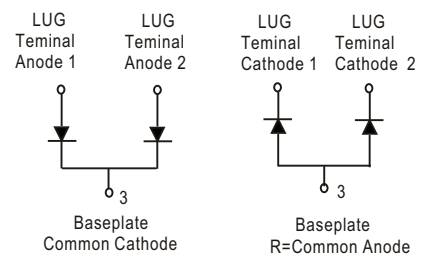
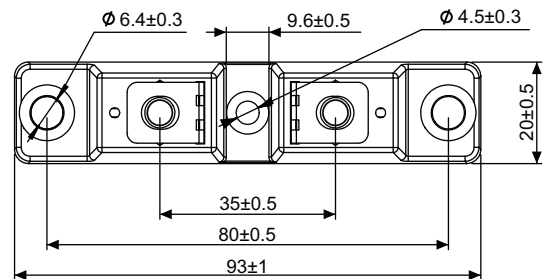
Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRQ600100CT(R)	100V	70V	100V

Dimensions in mm (1 mm = 0.0394")



Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current (Per pkg)	$I_{F(AV)}$	600A	$T_c = 125^\circ\text{C}$
Peak Forward Surge Current (Per diode)	I_{FSM}	4000A	8.3ms, half sine
Maximum Instantaneous Forward Voltage* (Per diode)	V_F	0.84V	$I_{FM}=300A; T_J=25^\circ\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage* (Per diode)	I_R	1mA 10mA 50mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$ $T_J = 150^\circ\text{C}$
Maximum Thermal Resistance Junction To Case (Per diode)	$R_{\theta jc}$	0.28°C/W	
Mounting torque		4 ± 0.5Nm 4 ± 0.5Nm	To heatsink To terminals



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



Figure.1 - Typical Forward Characteristics

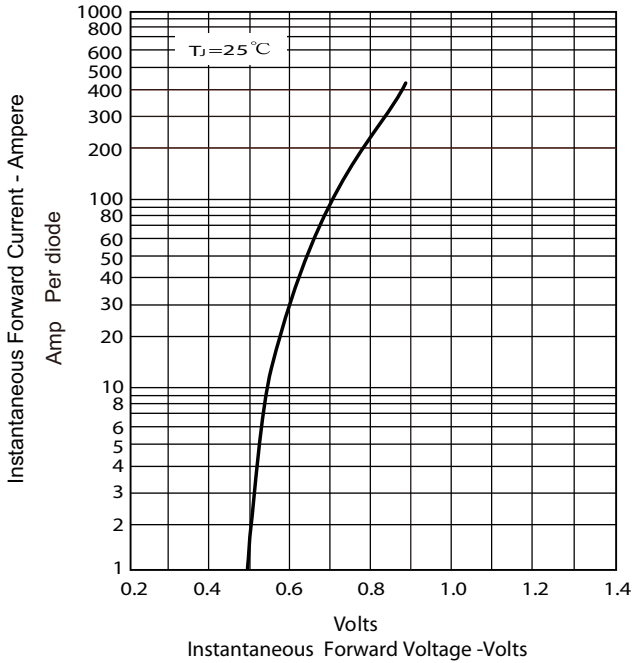


Figure.2 - Forward Derating Curve

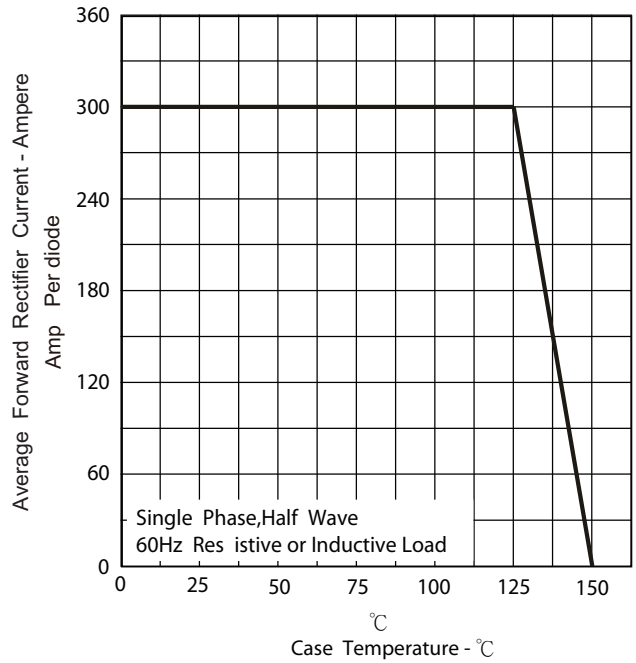


Figure.3 - Peak Forward Surge Current

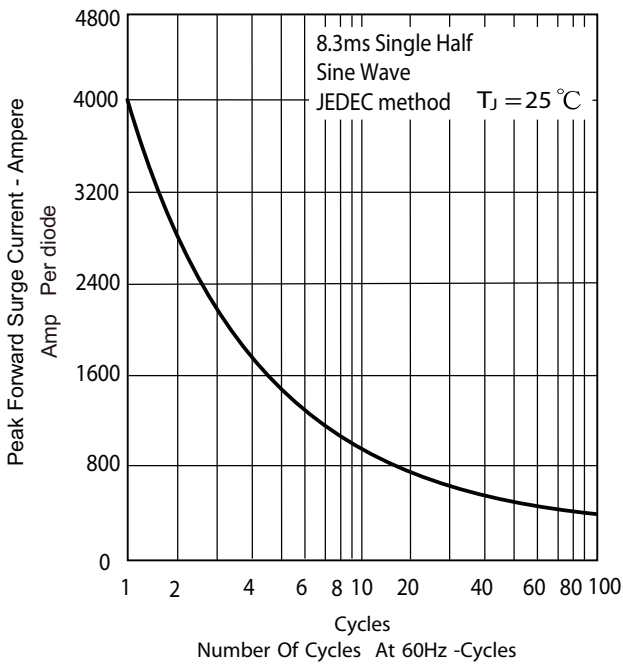
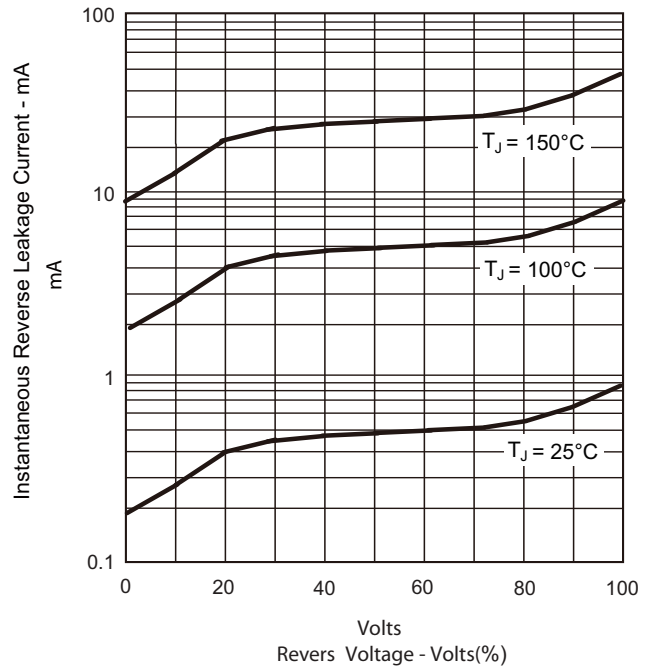


Figure.4 - Typical Reverse Characteristics





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