



### SCHOTTKY DIODE MODULE TYPE 300A / 150V

#### Features

High Surge Capability  
Type 150V  $V_{RRM}$

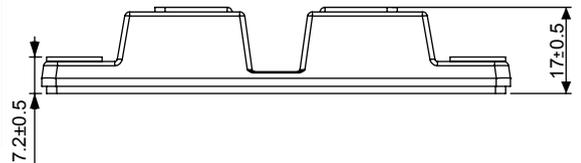
#### Maximum Ratings

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



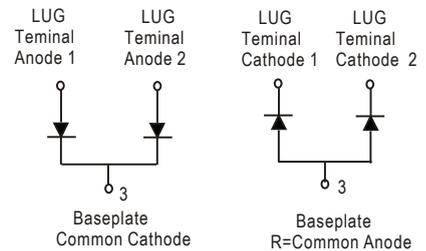
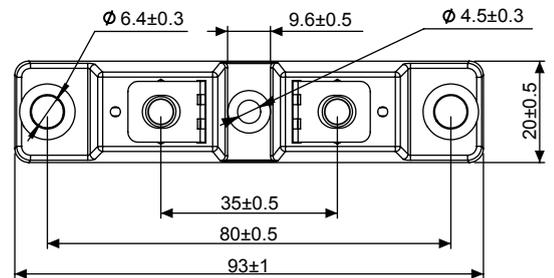
Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRQ302150CT(R)	150V	105V	150V

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)	$I_{FSM}$	2000A	8.3ms , half sine
Maximum (Per diode) Instantaneous Forward Voltage*	$V_F$	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 diode)	$I_R$	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 diode)	$R_{\theta jc}$	0.40°C/W	
Mounting torque		4 ± 0.5Nm 4 ± 0.5Nm	To heatsink To terminals



\*Pulse Test: Pulse Width 300  $\mu$  sec, Duty Cycle < 2%



Figure .1- Typical Forward Characteristics

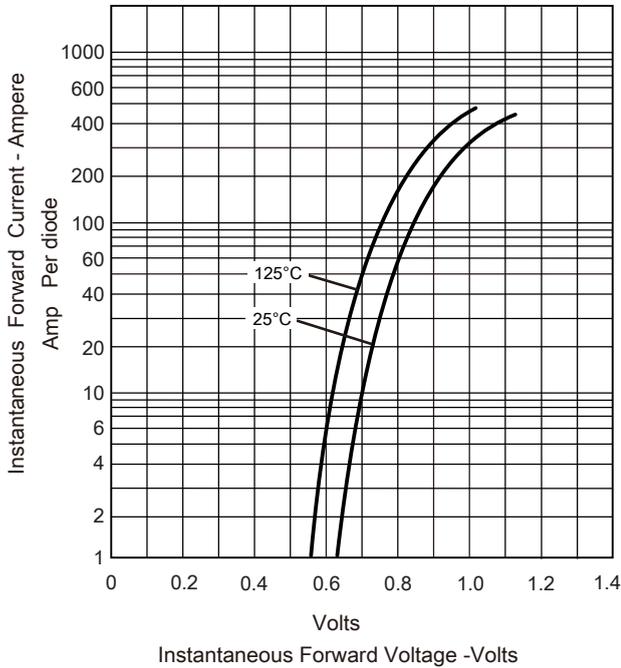


Figure .2-Forward Derating Curve

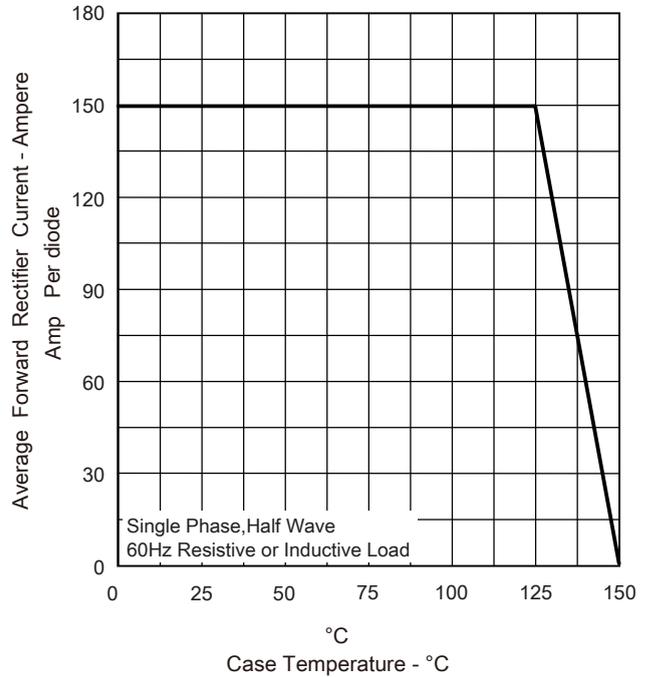


Figure .3- Peak Forward Surge Current

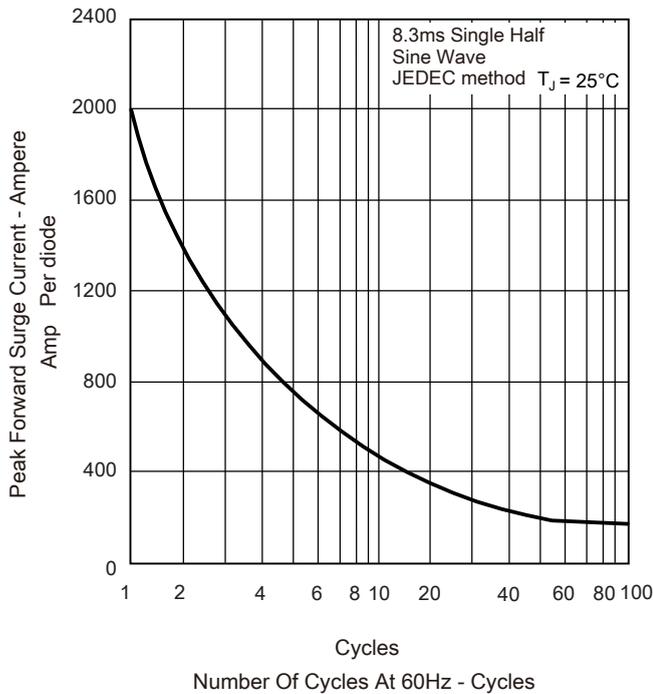
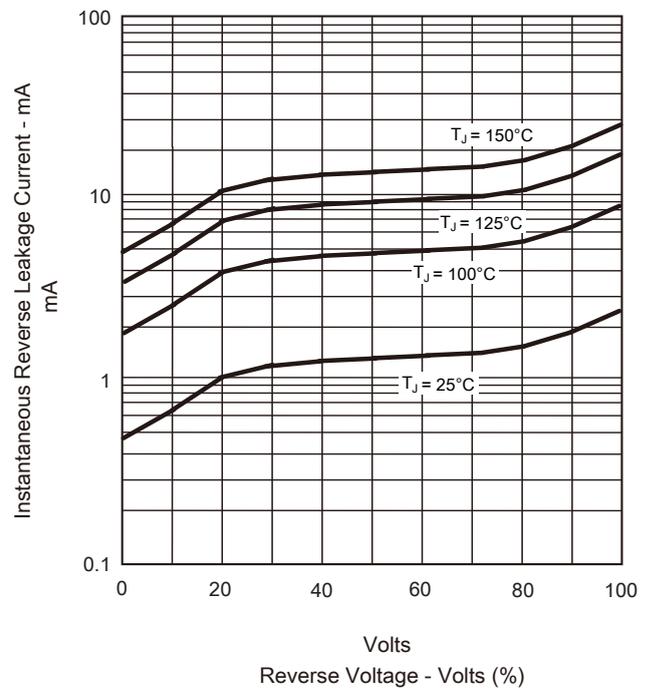


Figure .4-Typical Reverse Characteristics





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