



SCHOTTKY DIODE MODULE TYPE 600A

Features

High Surge Capability
Type 100V V_{RRM}

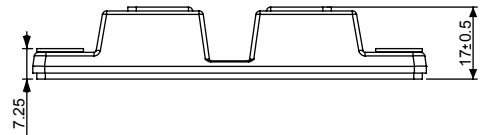


Maximum Ratings

Operating Temperature: -55°C to $+150^{\circ}\text{C}$
Storage Temperature: -55°C to $+150^{\circ}\text{C}$

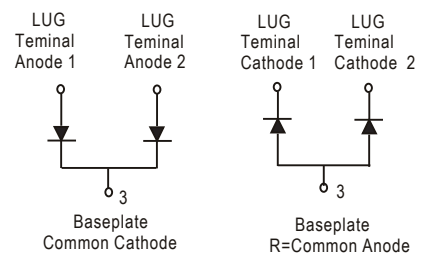
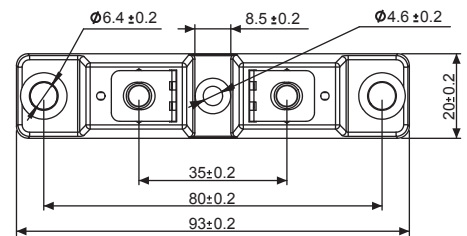
Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRQ600100CT(R)	100V	70V	100V

Dimensions in mm (1 mm = 0.0394")



Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current (Per pkg)	$I_{F(AV)}$	600A	$TC=125^{\circ}\text{C}$
Peak Forward Surge Current (Per leg)	I_{FSM}	4000A	8.3ms, half sine
Maximum Instantaneous Forward Voltage (Per leg) NOTE (1)	V_F	0.84V	$I_{FM}=300\text{A}; T_J=25^{\circ}\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg) NOTE (1)	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 leg)	$R_{\theta jc}$	0.28°C/W	
Mounting torque		$3 \pm 0.5\text{Nm}$ $3 \pm 0.5\text{Nm}$	To heatsink To terminals



NOTE :

(1) Pulse Test: Pulse Width $300 \mu\text{sec}$. Duty Cycle $< 2\%$



Figure.1 - Typical Forward Characteristics

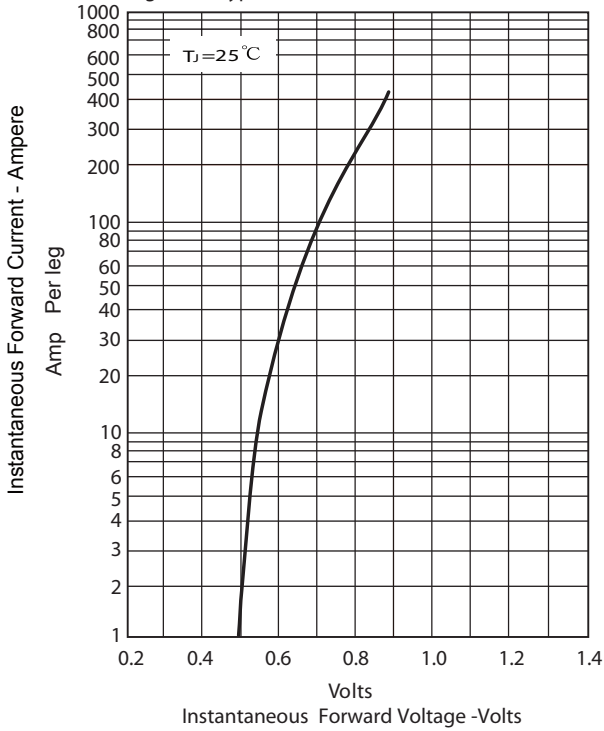


Figure.2 - Forward Derating Curve

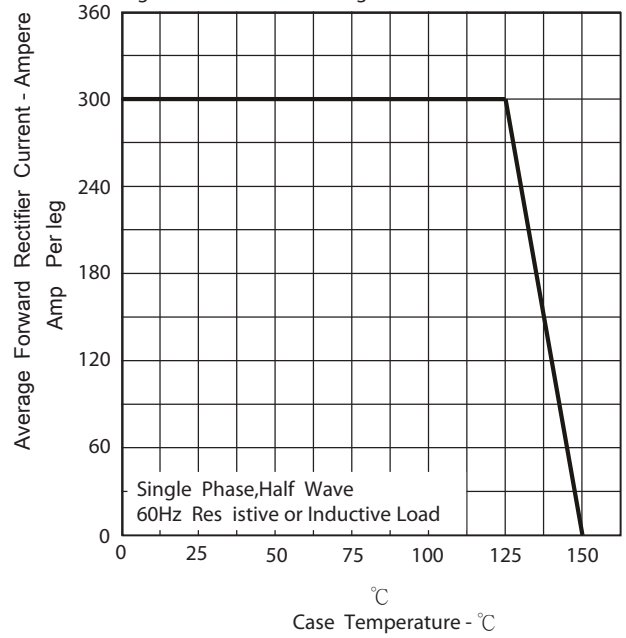


Figure.3 - Peak Forward Surge Current

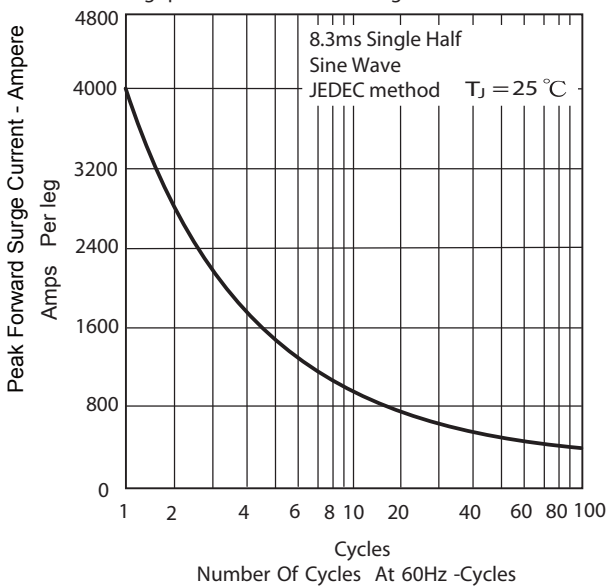


Figure.4 - Typical Reverse Characteristics

