

SCHOTTKY DIODE MODULE TYPES 400A / 80-100V

Features

High Surge Capability
Types up to 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
MBR40080CT(R)	80V	56V	80V
MBR40090CT(R)	90V	63V	90V
MBR400100CT(R)	100V	70V	100V

Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current (Per pkg)	$I_{F(AV)}$	400A	$T_C = 125^\circ C$
Peak Forward Surge Current (Per diode)	I_{FSM}	3000A	8.3ms , half sine
Maximum Instantaneous Forward Voltage* (Per diode)	V_F	0.76V 0.84V	$I_{FM}=200A; T_J = 125^\circ C$ $I_{FM}=200A; T_J = 25^\circ C$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage* (Per diode)	I_R	1mA 8mA 15mA	$T_J = 25^\circ C$ $T_J = 125^\circ C$ $T_J = 150^\circ C$
Maximum Thermal Resistance Junction To Case (Per diode)	$R_{\theta jc}$	0.35°C/W	
Mounting torque		35-40 In-lb 30-40 In-lb 8-10 In-lb	Terminal Torque Outside holes Center hole
Weight		84g	

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



Dimensions in mm (1 mm = 0.0394")

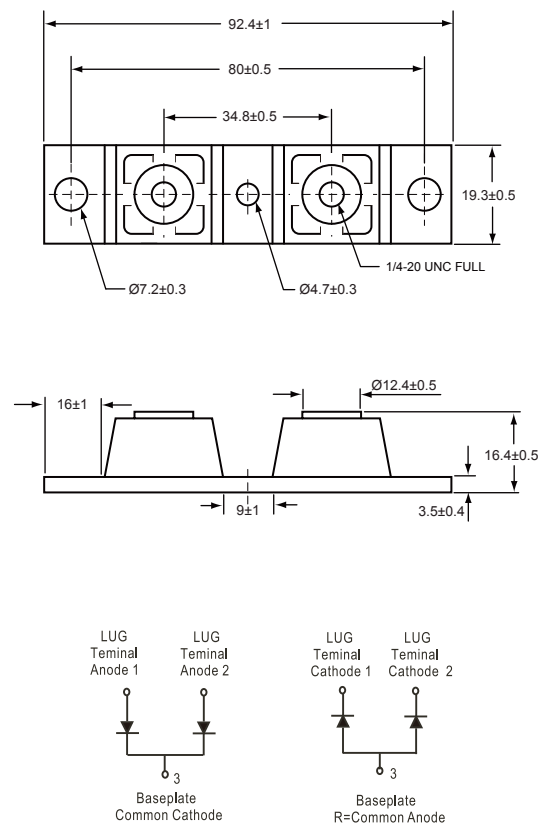




Figure .1- Typical Forward Characteristics

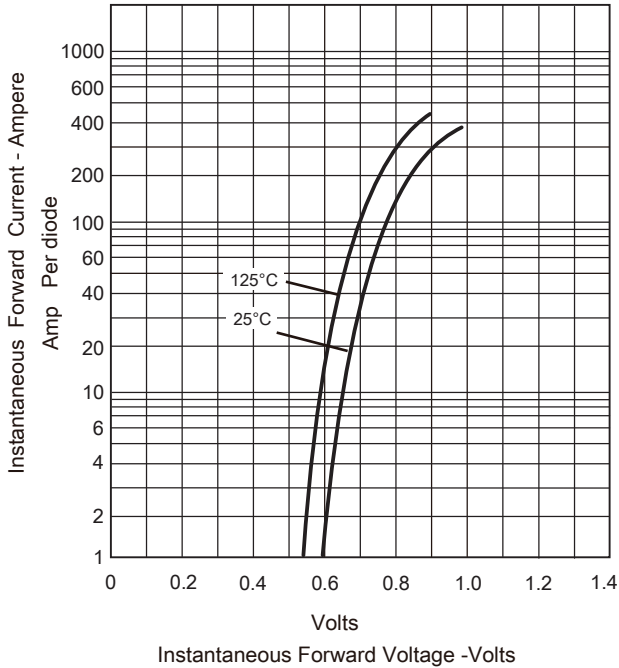


Figure .2-Forward Derating Curve

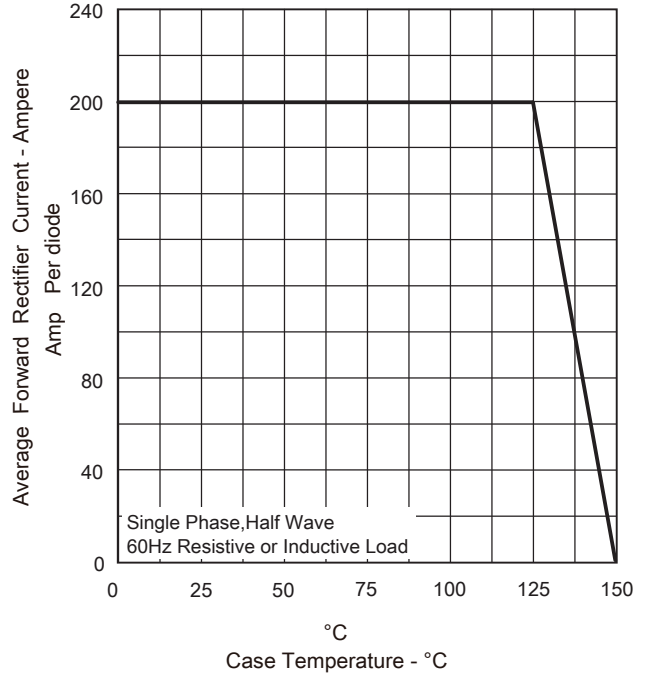


Figure .3- Peak Forward Surge Current

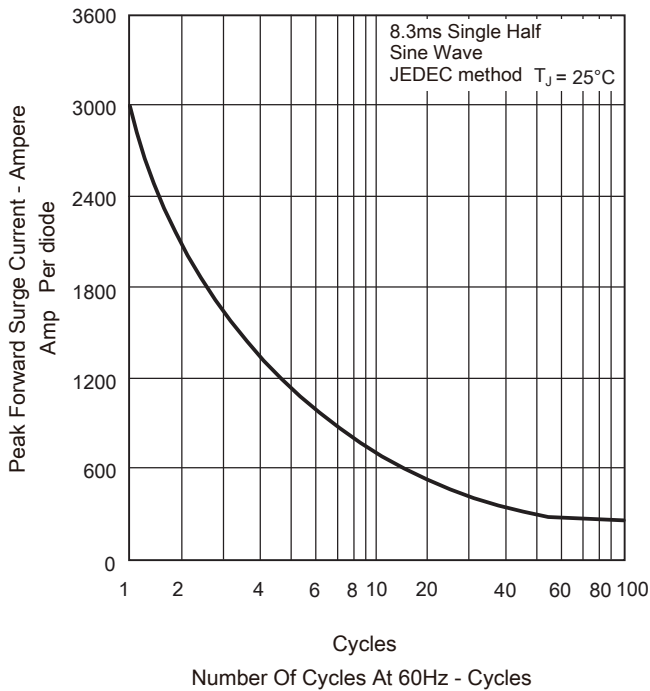
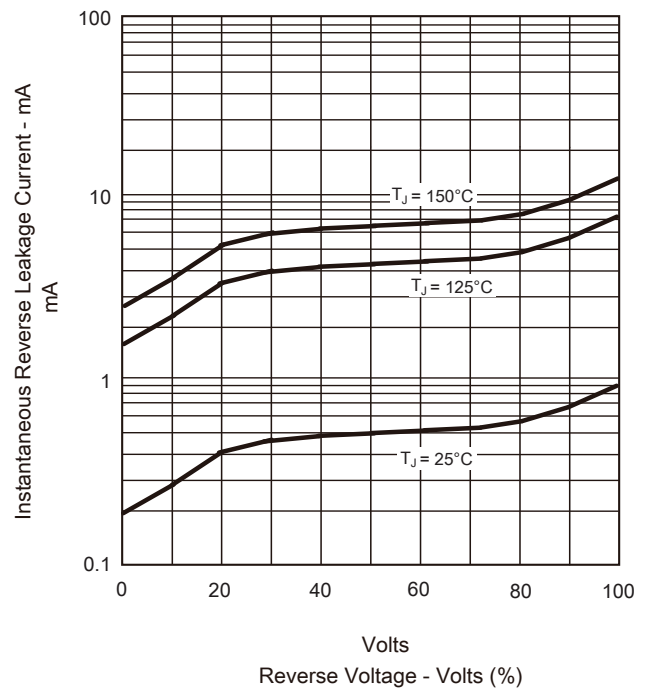


Figure .4-Typical Reverse Characteristics





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