

DACO SEMICONDUCTOR CO., LTD.

**MBRT12020(R)
THRU
MBRT12060(R)**

SCHOTTKY DIODE MODULE TYPES 120A / 20V-60V

Features

- High Surge Capability
- Types Up to 60V V_{RRM}
- Isolation Type Package
- Electrically Isolation base plate

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
MBRT12020(R)	20V	14V	20V
MBRT12030(R)	30V	21V	30V
MBRT12035(R)	35V	25V	35V
MBRT12040(R)	40V	28V	40V
MBRT12045(R)	45V	32V	45V
MBRT12060(R)	60V	42V	60V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current (Per pkg)	$I_{F(AV)}$	120A	$T_C = 125^\circ\text{C}$
Peak Forward Surge Current (Per diode)	I_{FSM}	800A	8.3ms, half sine
Maximum Instantaneous Forward Voltage (Per diode) 20V~45V 60V	V_F	0.70V 0.75V	$I_{FM} = 60\text{A};$ $T_J = 25^\circ\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per diode)	I_R	1 mA 2 mA 10 mA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$ $T_J = 150^\circ\text{C}$
Isolation Voltage	V_{iso}	2500V	A.C. 1 minute
Maximum Thermal Resistance Junction To Case (Per diode)	$R_{\theta jc}$	0.80°C/W	
Weight		103g	

NOTE : (1) Pulse Test: Pulse Width 300 μ sec, Duty < 2%

THREE TOWER



Dimensions in mm (1 mm = 0.0394")

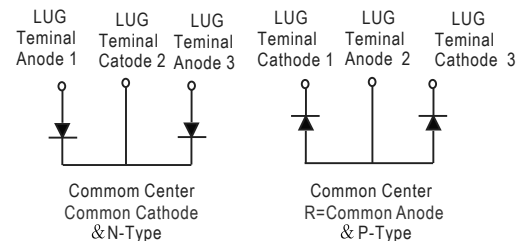
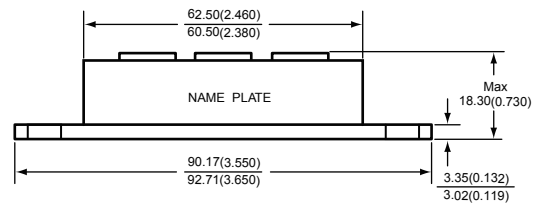
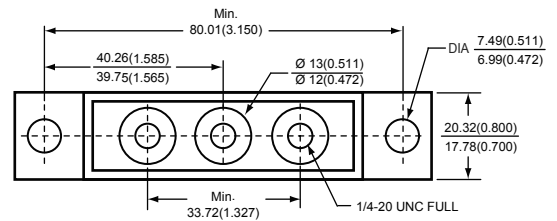




Figure .1- Typical Forward Characteristics

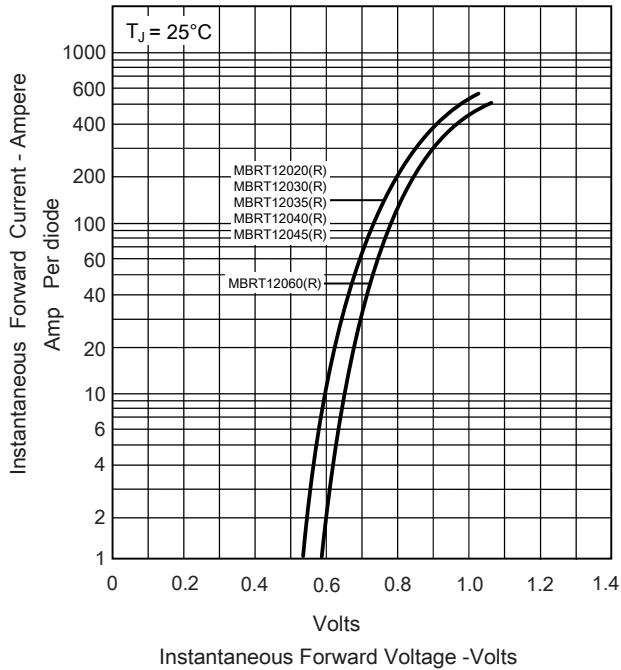


Figure .2-Forward Derating Curve

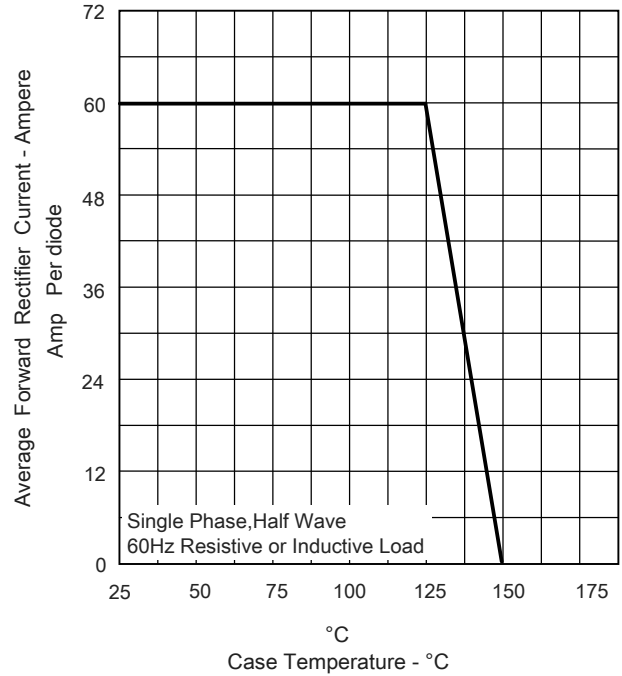


Figure .3- Peak Forward Surge Current

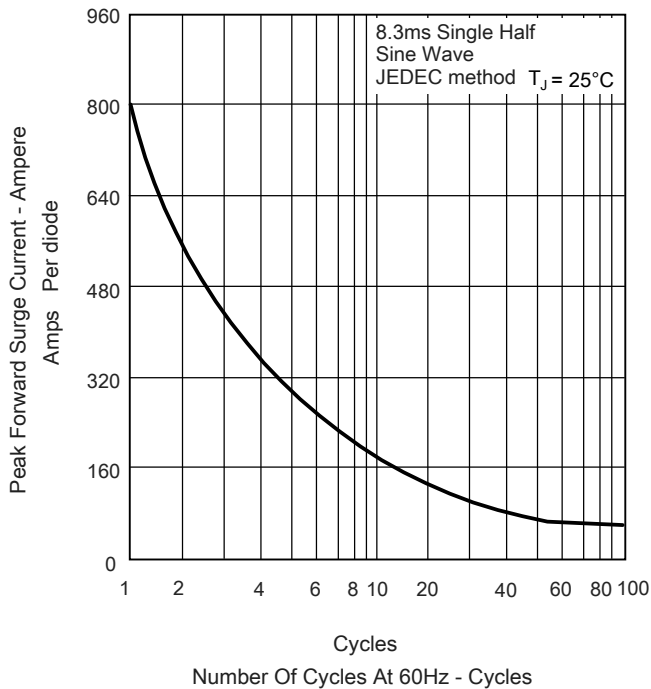
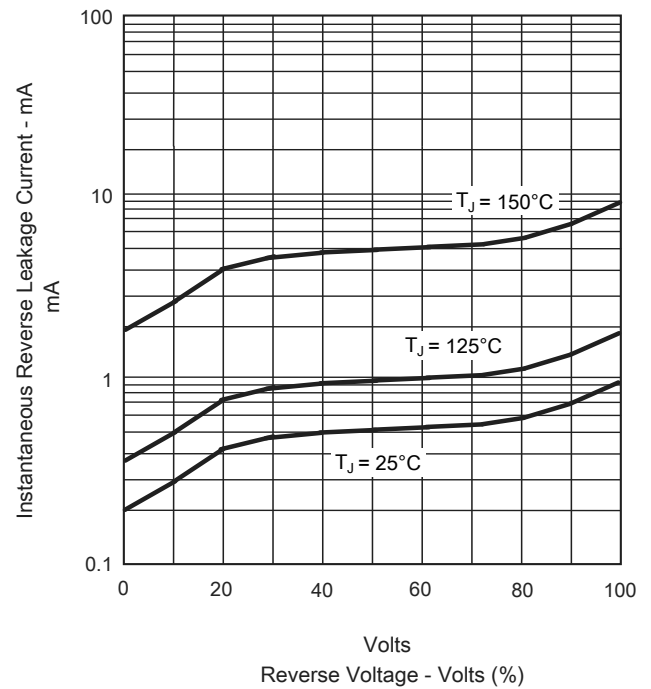


Figure .4- Typical Reverse Characteristics



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