

**SCHOTTKY DIODE MODULE TYPES 300A**

**Features**

- High Surge Capability
- Types Up to 45V  $V_{RRM}$
- Isolation Type Package
- Electrically Isolation Base Plate

**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
MBRTT30020(A)(D)(R)	20V	14V	20V
MBRTT30030(A)(D)(R)	30V	21V	30V
MBRTT30035(A)(D)(R)	35V	25V	35V
MBRTT30040(A)(D)(R)	40V	28V	40V
MBRTT30045(A)(D)(R)	45V	32V	45V

**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Average Forward Current (Per pkg) (Per diode)	$I_{F(AV)}$	300A 150A	$T_C = 125^\circ C$
Peak Forward Surge Current (Per diode)	$I_{FSM}$	2000A	8.3ms, half sine
Maximum Instantaneous Forward Voltage* (Per diode)	$V_F$	0.66V 0.72V	$I_{FM} = 150A; T_J = 125^\circ C$ $I_{FM} = 150A; T_J = 25^\circ C$
Maximum Instantaneous Reverse Current At Rated DC Blockig Voltage* (Per diode)	$I_R$	1mA 8mA 40mA	$T_J = 25^\circ C$ $T_J = 125^\circ C$ $T_J = 150^\circ C$
Isolation Voltage	$V_{iso}$	2500V	A.C. 1 minute
Maximum Thermal Resistance Junction To Case (Per diode)	$R_{\theta jc}$	0.40°C/W	
Mounting Torque		4 ± 0.5Nm 3 ± 0.5Nm	to heatsink to terminals

\*Pulse Test: Pulse Width 300μsec, Duty Cycle < 2%



Dimensions in mm (1mm = 0.0394")

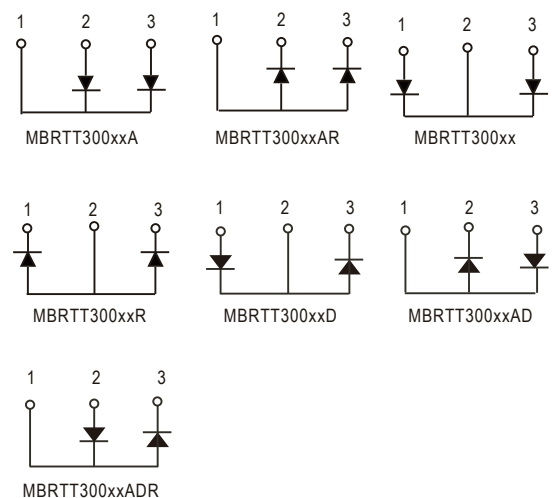
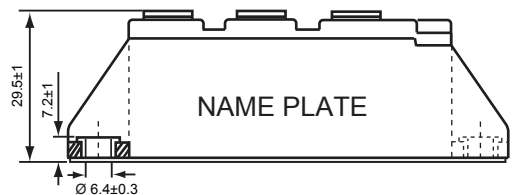
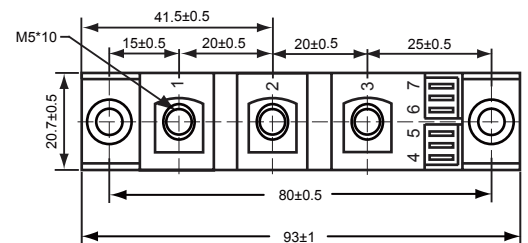




Figure.1 - Typical Forward Characteristics

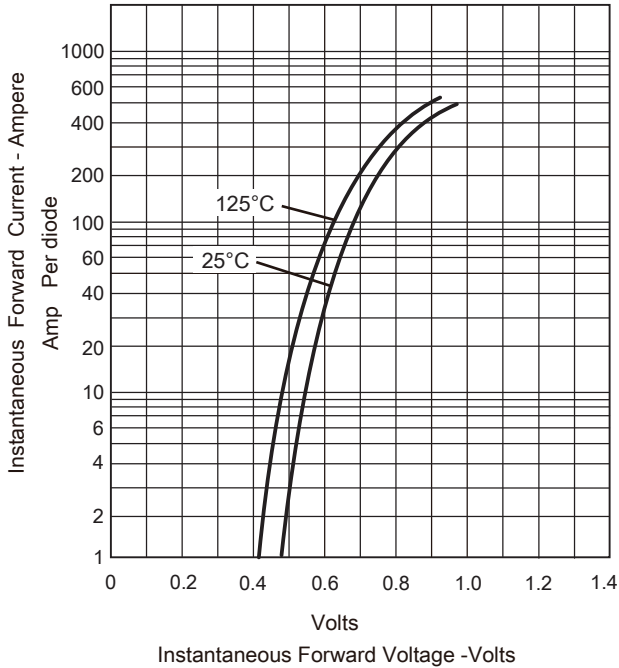


Figure.2 - Forward Derating Curve

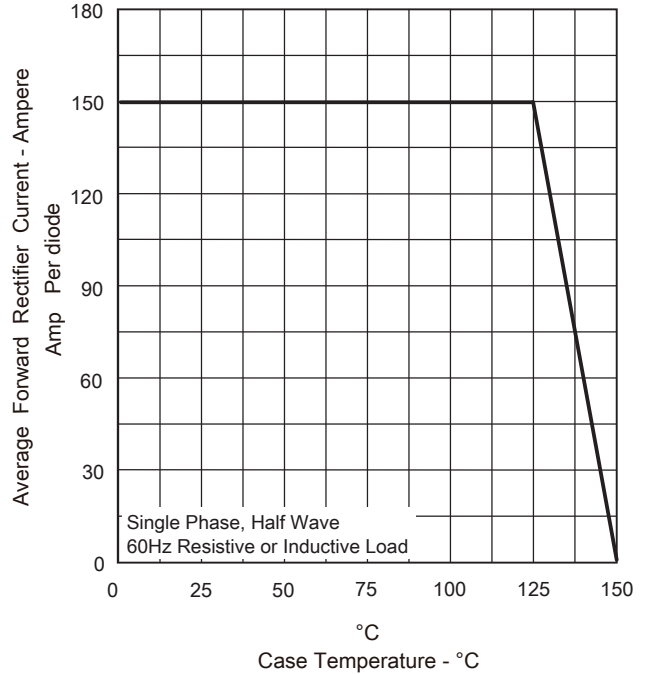


Figure.3 - Peak Forward Surge Current

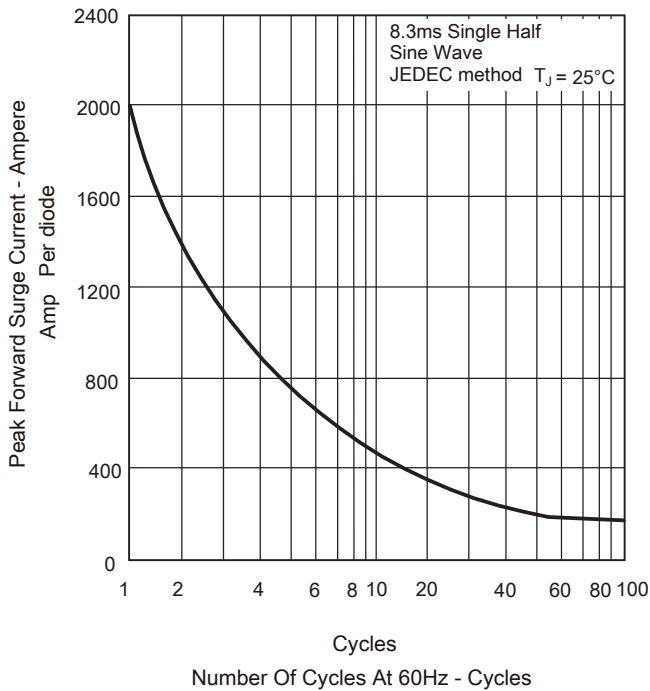
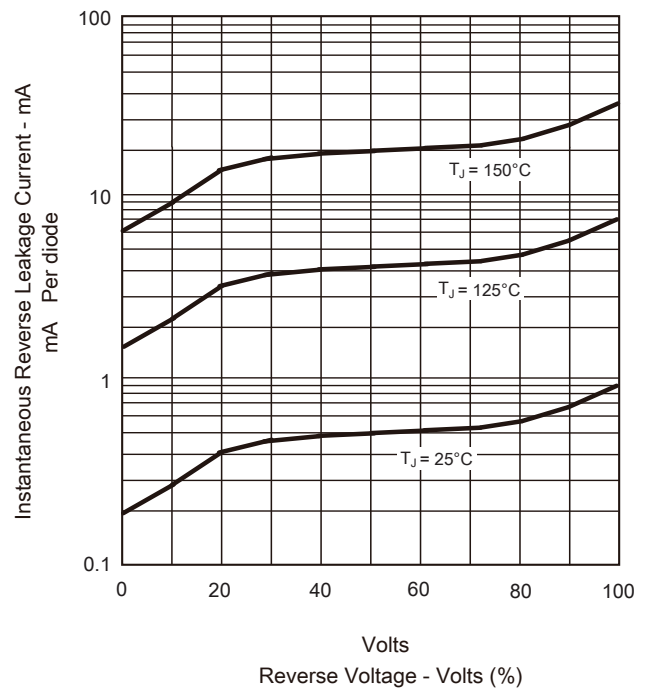


Figure.4 - Typical Reverse Characteristics





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