



# SCHOTTKY DIODE MODULE TYPE 2X120A / 45V

## Features

- High Surge Capability
- Type 45V  $V_{RRM}$
- Isolation Type Package
- Electrically Isolation Base Plate
- RoHS Compliant

## Maximum Ratings

Junction Operating Temperature : -40°C to +150°C

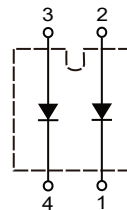
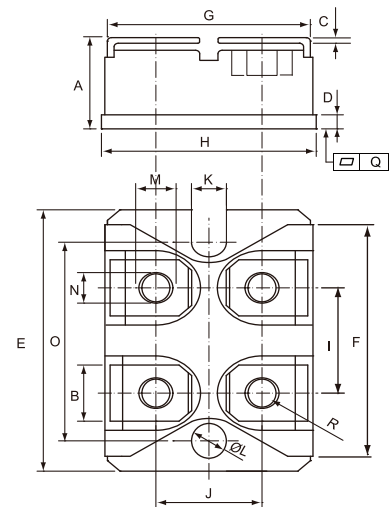
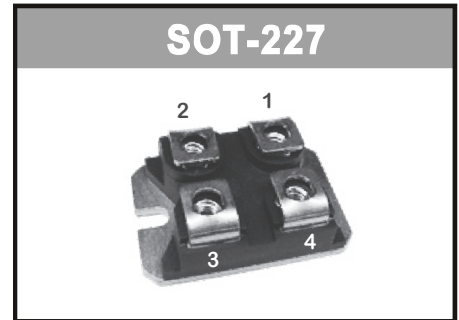
Storage Temperature : -40°C to +150°C

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRI2X121-045A	45V	32V	45V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current (Per pkg) (Per diode)	$I_{F(AV)}$	240A 120A	$T_C = 110^\circ\text{C}$
Peak Forward Surge Current (Per diode)	$I_{FSM}$	1500A	8.3ms, half sine
Maximum Instantaneous Forward Voltage* (Per diode)	$V_F$	0.64V 0.70V	$I_{FM} = 120\text{A}; T_J = 125^\circ\text{C}$ $I_{FM} = 120\text{A}; T_J = 25^\circ\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blockig Voltage* (Per diode)	$I_R$	1mA 10mA 30mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$ $T_J = 150^\circ\text{C}$
Isolation Voltage	$V_{iso}$	2500V	A.C. 1 minute
Maximum Thermal Resistance Junction To Case (Per diode)	$R_{\theta jc}$	0.38°C/W	
Mounting Torque		1.3Nm	M4 Screw

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



MBRI 2X121 - xxxA

	DIMENSIONS			
	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.460	0.483	11.68	12.28
B	0.307	0.323	7.80	8.20
C	0.030	0.033	0.75	0.85
D	0.071	0.081	1.80	2.05
E	1.488	1.504	37.80	38.20
F	1.248	1.260	31.70	32.00
G	0.917	0.957	23.30	24.30
H	0.996	1.008	25.30	25.60
I	0.579	0.602	14.70	15.30
J	0.492	0.516	12.50	13.10
K	0.161	0.169	4.10	4.30
L	0.161	0.169	4.10	4.30
M	0.181	0.197	4.60	5.00
N	0.165	0.181	4.20	4.60
O	1.181	1.197	30.00	30.40
Q	-0.002	0.004	-0.05	0.10
R	M4*8			



Figure.1 - Typical Forward Characteristics

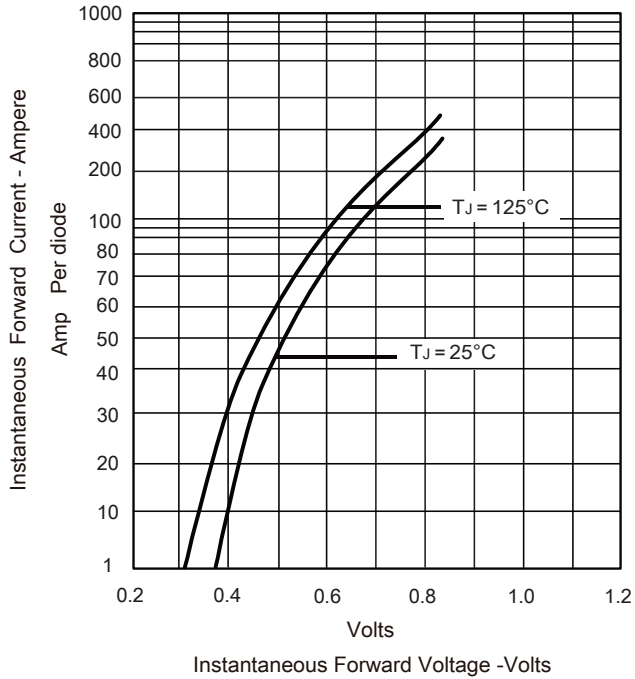


Figure.2 - Forward Derating Curve

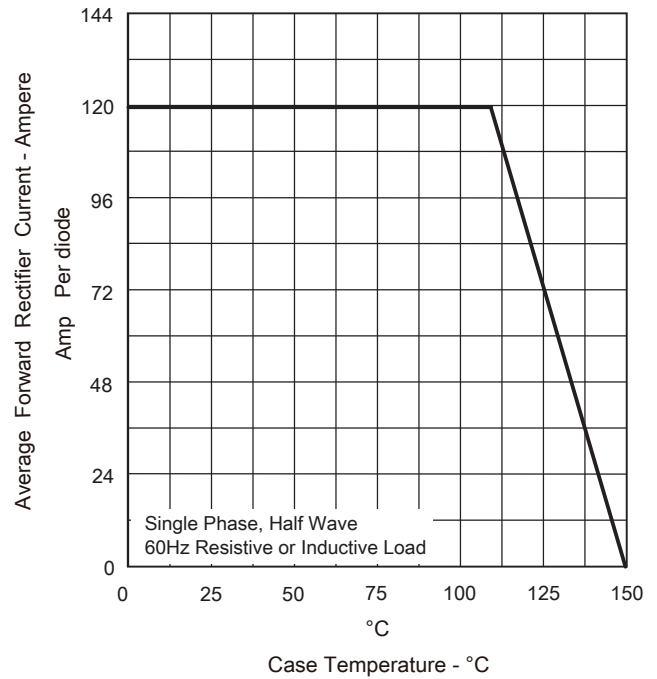


Figure.3 - Peak Forward Surge Current

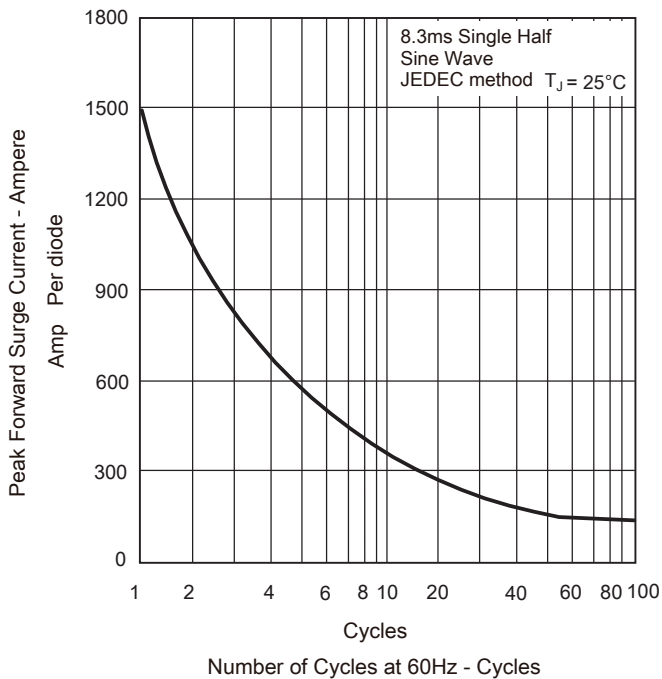
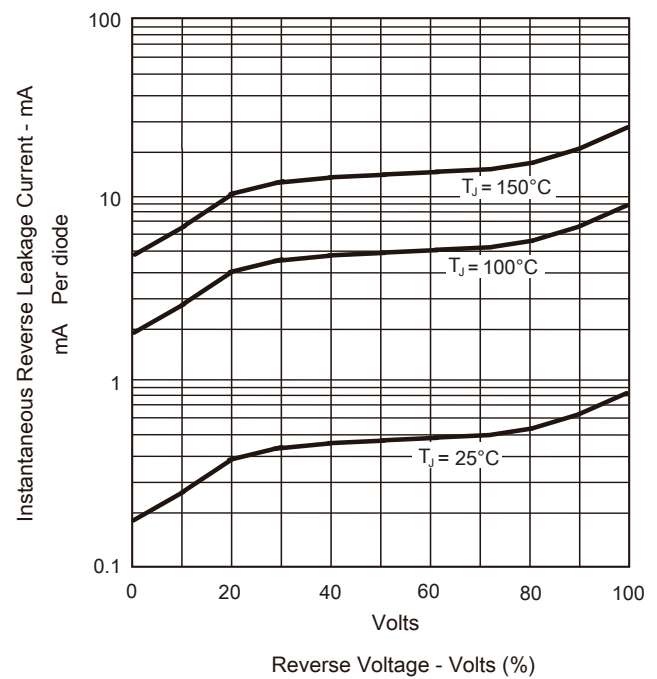


Figure.4 - Typical Reverse Characteristics





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