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MBRX02520 THRU MBRX025100

0.25 Amp Schottky Barrier Rectifier 20 to 100 Volts

Features

- High Current Capability
- Extremely Low Thermal Resistance
- Reverse Energy Tested
- Guard Ring Protection
- Low Forward Voltage

Maximum Ratings

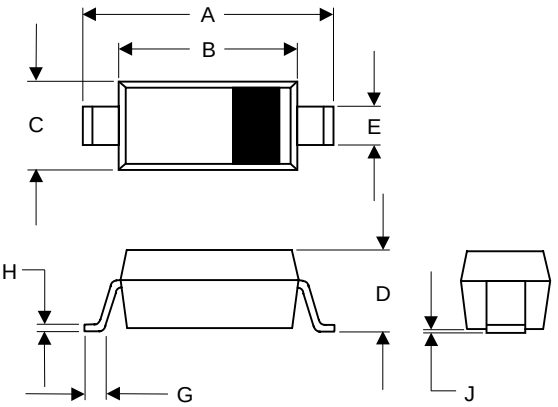
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance: 65°C/W Junction to Lead

Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRX02520	N/A	20V	14V	20V
MBRX02530	N/A	30V	21V	30V
MBRX02540	N/A	40V	28V	40V
MBRX02550	N/A	50V	35V	50V
MBRX02560	N/A	60V	42V	60V
MBRX02580	N/A	80V	56V	80V
MBRX025100	N/A	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	0.25A	T_J=115°C
Peak Forward Surge Current	I_{FSM}	12.5A	8.3ms half sine
Maximum Instantaneous Forward Voltage MBRX02520 MBRX02530-40 MBRX02550-60 MBRX02580-100	V_F	0.45V 0.55V 0.70V 0.85V	I_{FM}=0.25A T_J=25°C
Maximum DC Reverse Current At Rated DC Blocking	I_R	0.5mA 20mA	T_A=25°C T_A=100°C
Typical Junction Capacitance	C_J	10pF	Measured at 1.0MHz, V_R=4.0V

SOD323



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.090	.107	2.30	2.70	
B	.063	.071	1.60	1.80	
C	.045	.053	1.15	1.35	
D	.031	.045	0.80	1.15	
E	.010	.016	0.25	0.40	
G	.004	.018	0.10	0.45	
H	.004	.010	0.10	0.25	
J	-----	.006	-----	0.15	

SUGGESTED SOLDER PAD LAYOUT

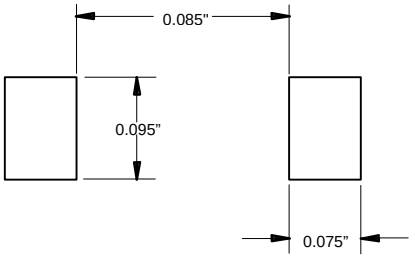
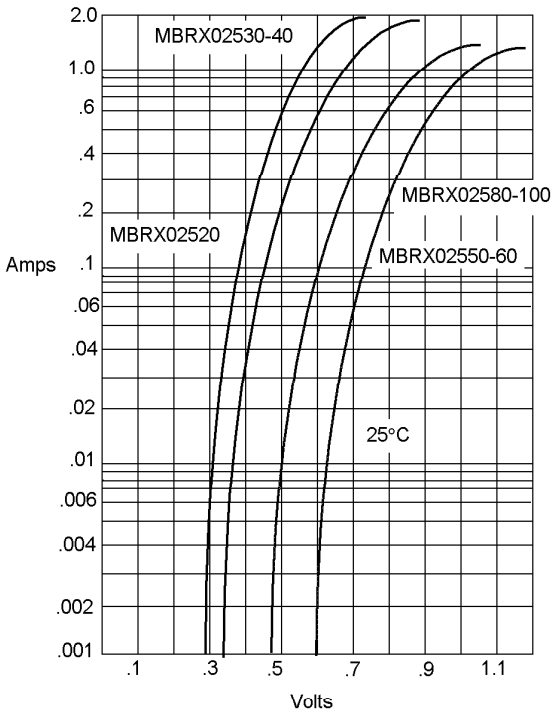
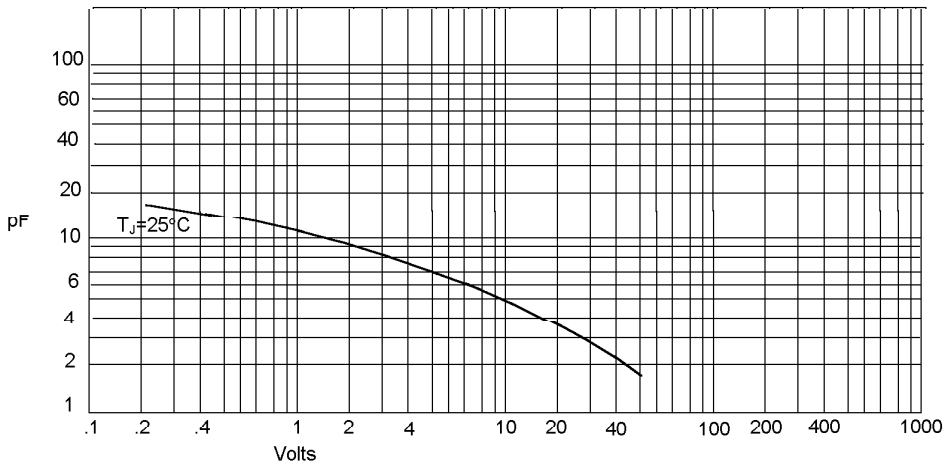


Figure 1
Typical Forward Characteristics



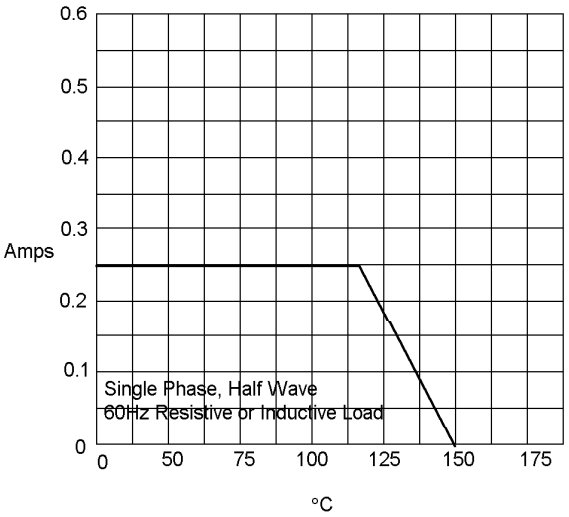
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Junction Capacitance



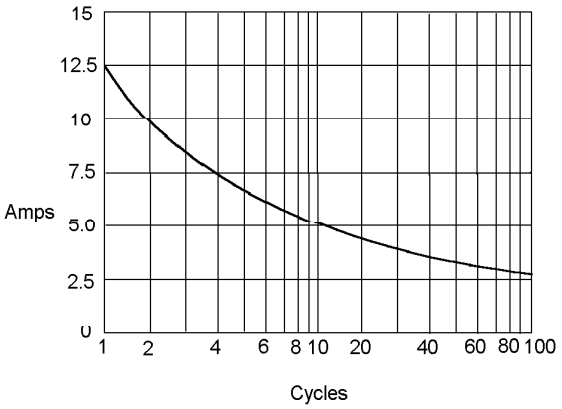
Junction Capacitance - pF *versus*
Reverse Voltage - Volts

Figure 3
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*
Ambient Temperature - °C

Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles