

MBRX02520 THRU MBRX02560

**0.25 Amp
Schottky Barrier
Rectifier
20 to 60 Volts**

Features

- Lead Free Finish/RoHS Compliant (NOTE 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Extremely Low Thermal Resistance
- Reverse Energy Tested and High Current Capability
- Guard Ring Protection
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

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

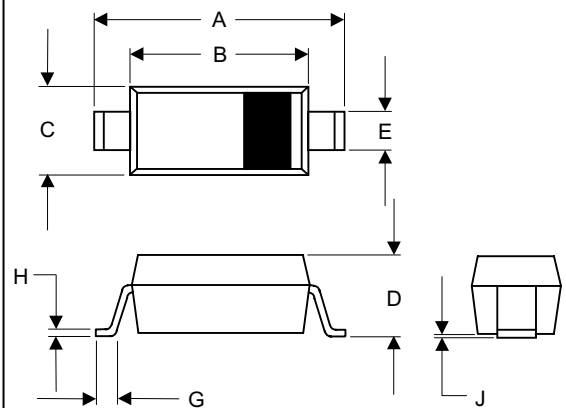
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRX02520	A	20V	14V	20V
MBRX02530	B	30V	21V	30V
MBRX02540	C	40V	28V	40V
MBRX02550	D	50V	35V	50V
MBRX02560	E	60V	42V	60V

Electrical Characteristics @ 25°C Unless Otherwise Specified

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

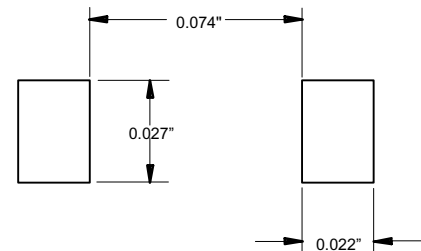
Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7

SOD323



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.090	.113	2.30	2.88	
B	.063	.071	1.60	1.80	
C	.045	.053	1.15	1.35	
D	.031	.049	0.80	1.24	
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



MBRX02520 thru MBRX02560

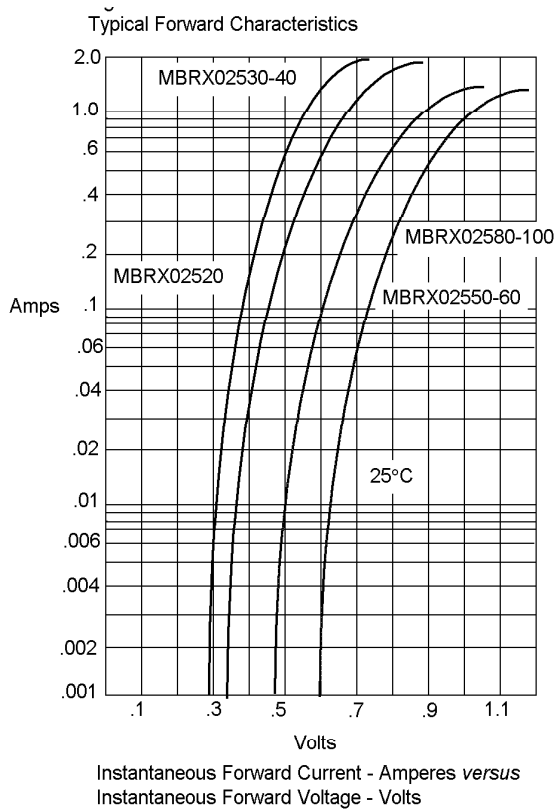
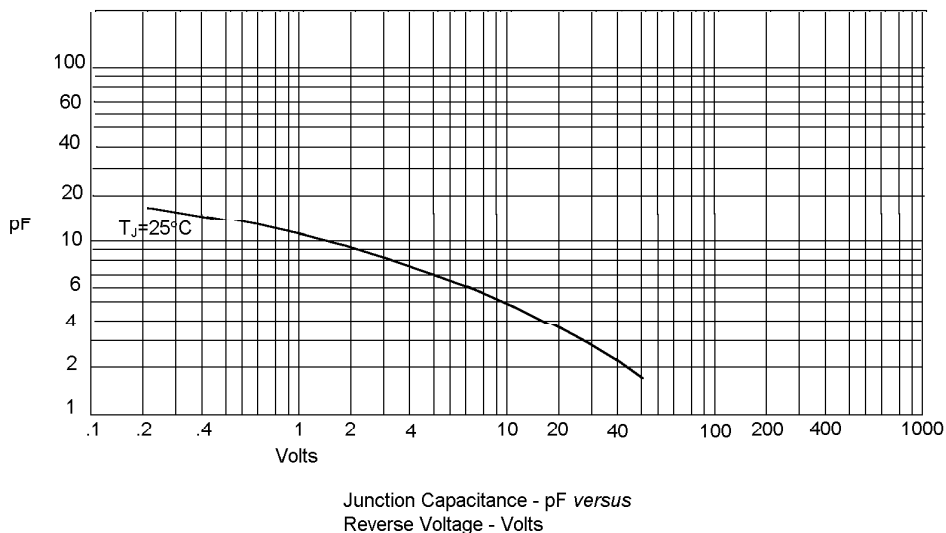
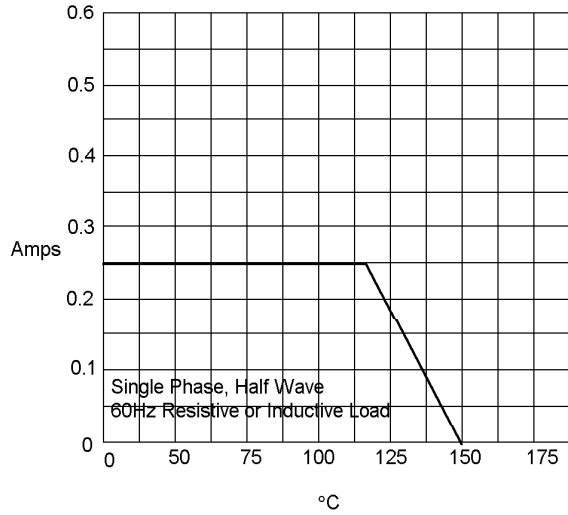


Figure 2
Junction Capacitance



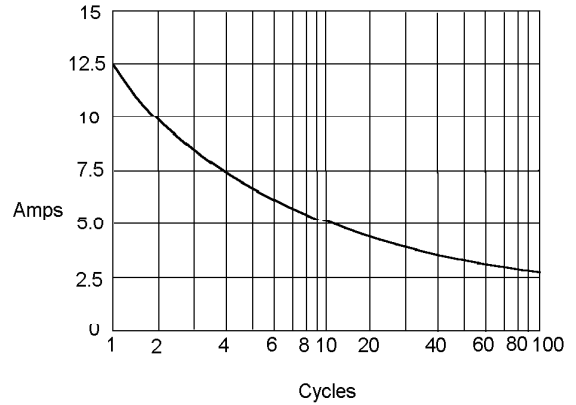
MBRX02520 thru MBRX02560

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

Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;3Kpcs/Reel