Micro Commercial Components
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MBR0520 THRU MBR0580

0.5 Amp Schottky Rectifier 20 to 80 Volts

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- For Surface Mount Application
- Low Forward Voltage and Extremely Low Thermal Resistance
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

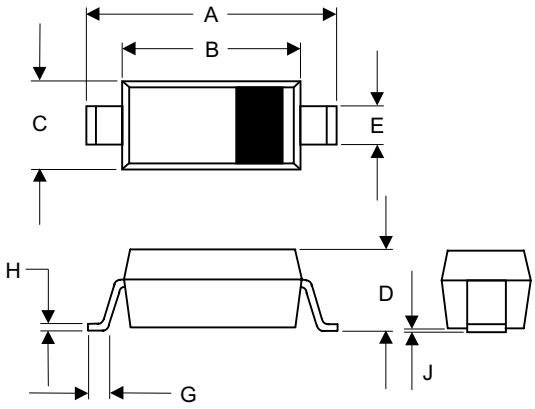
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance: 244°C/W Junction to Ambient

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR0520	R2	20V	14V	20V
MBR0530	R3	30V	21V	30V
MBR0540	R4	40V	28V	40V
MBR0560	R6	60V	42V	60V
MBR0580	R8	80V	56V	80V

Electrical Characteristics @ 25°C Unless Otherwise Specified

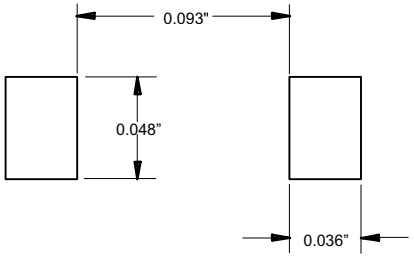
Average Forward Current	$I_{F(AV)}$	0.5A	T_A=50°C
Peak Forward Surge Current	I_{FSM}	5.5A	8.3ms half sine
Maximum Instantaneous Forward Voltage MBR0520 MBR0530 MBR0540 MBR0560 MBR0580	V_F	0.45V 0.55V 0.55V 0.70V 0.80V	I_{FM}=0.5A T_A=25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	0.2mA	T_J=25°C
Typical Junction Capacitance	C_J	30pF	Measured at 1.0MHz, V_R=4.0 V
Power dissipation	P_D	410mW	

SOD123



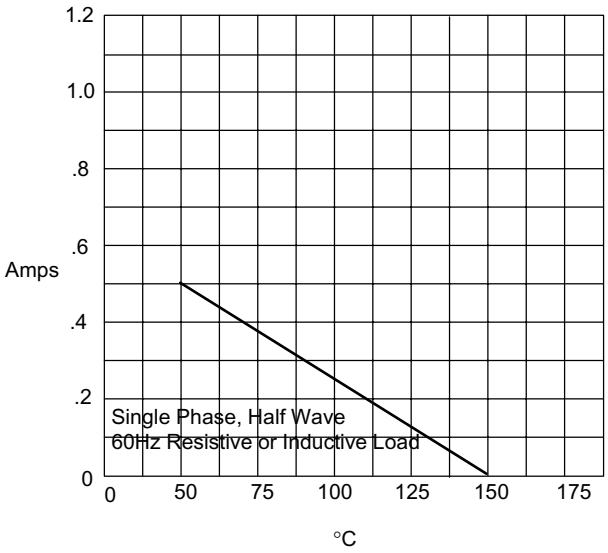
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	-----	.053	-----	1.35	
E	.012	.031	0.30	.78	
G	.006	-----	0.15	-----	
H	-----	.01	-----	.25	
J	-----	.006	-----	.15	

SUGGESTED SOLDER PAD LAYOUT



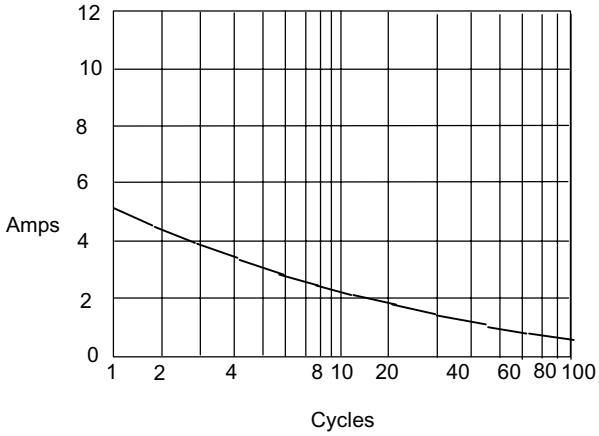
MBR0520 thru MBR0580

Figure 1
Forward Derating Curve



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

Figure 2
Peak Forward Surge Current



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

Figure 3
Typical Forward Characteristics
MBR0520

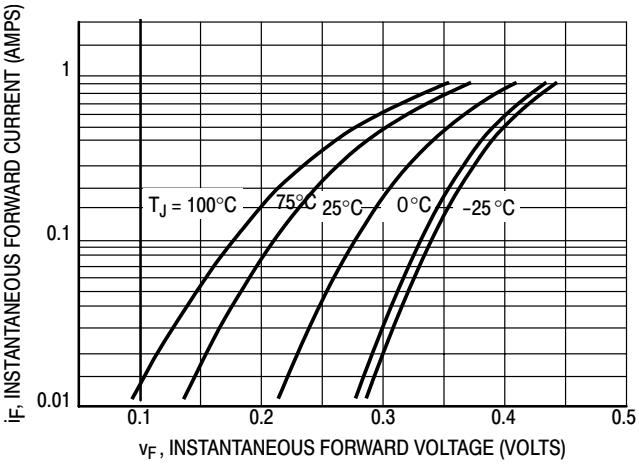


Figure 4
Typical Forward Characteristics
MBR0530~MBR0540

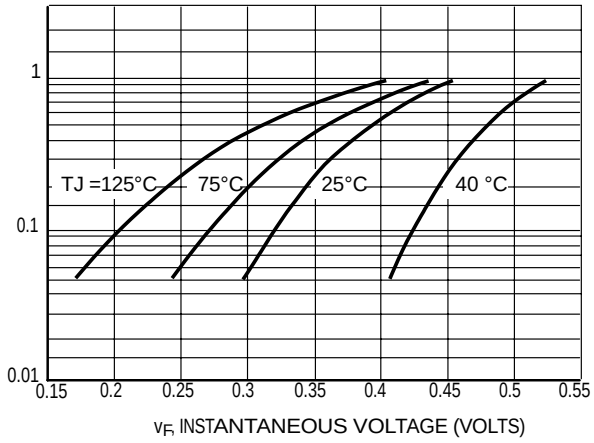


Figure 5
Typical Forward Characteristics
MBR0560

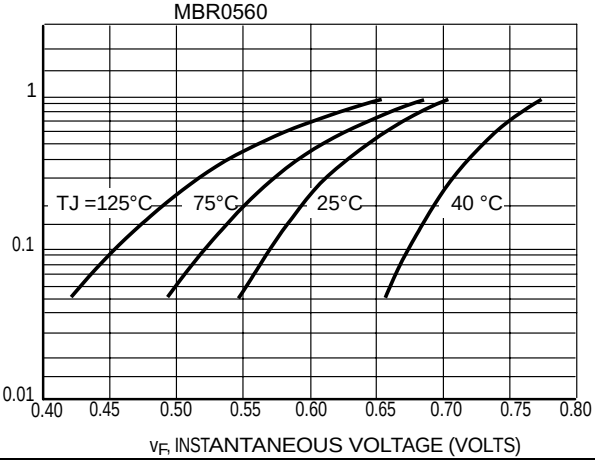
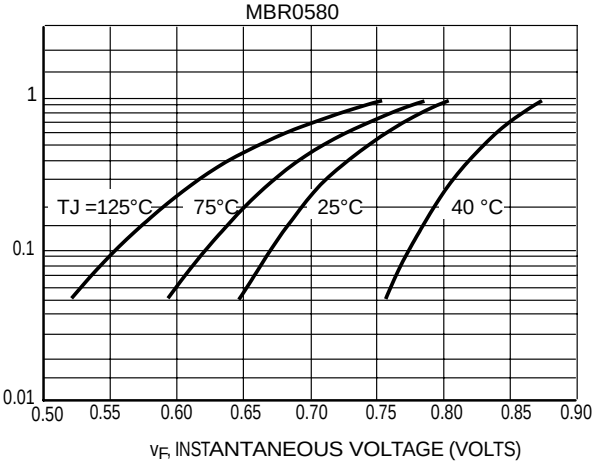


Figure 6
Typical Forward Characteristics
MBR0580



Micro Commercial Components

Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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