

Micro Commercial Components



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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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
- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

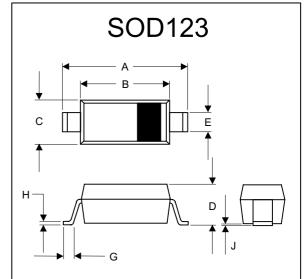
Maximum Ratings

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

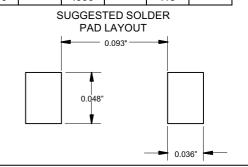
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR0520	R2	20V	14V	20V
MBR0530	R3	30V	21V	30V
MBR0540	R4	40V	28V	40V
MBR0560	R6	60V	42V	60V
MBR0580	R8	80V	56V	80V

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	Tյ=25°C
Typical Junction Capacitance	CJ	30pF	Measured at 1.0MHz, V _R =4.0 V
Power dissipation	P_D	410mW	



	DIMENSIONS							
DIM	INCHES		MM		NOTE			
	MIN	MAX	MIN	MAX				
Α	.140	.152	3.55	3.85				
В	.100	.112	2.55	2.85				
С	.055	.071	1.40	1.80				
D		.053		1.35				
Е	.012	.031	0.30	.78				
G	.006		0.15					
Н		.01		.25				
J		.006		.15				



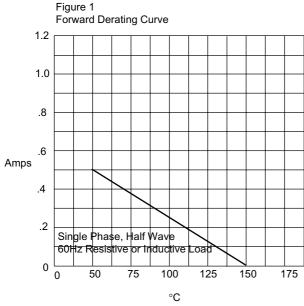


MBR0520 thru MBR0580

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40

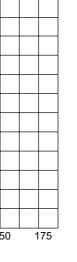
60 80 100



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

Typical Forward Characteristics

Figure 3



Number Of Cycles At 60Hz - Cycles

8 10 20

Cycles

Peak Forward Surge Current - Amperesversus

Figure 2

12

10

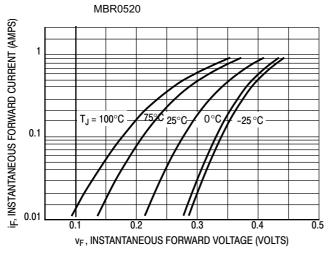
8

6

2

Amps

Peak Forward Surge Current



Typical Forward Characteristics

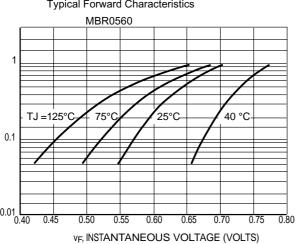


Figure 4 **Typical Forward Characteristics** MBR0530~MBR0540

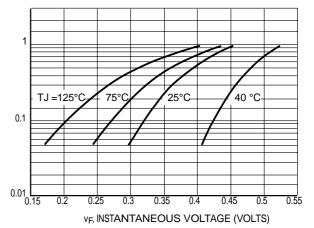
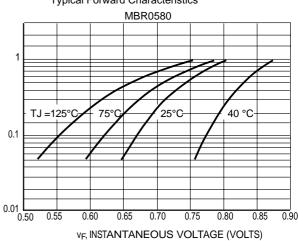


Figure 6 Typical Forward Characteristics





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Ordering Information:

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

Note: Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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