

**Micro Commercial Components** 



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 (818) 701-4939 Fax:

# MBRB2520CT **THRU** MBRB2560CT

# **Features**

- Guard ring for transient protection
- Low Forward Voltage Drop
- High Current Capability, High Efficiency
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking: type number Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)

- Maximum Ratings
  Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +175°C

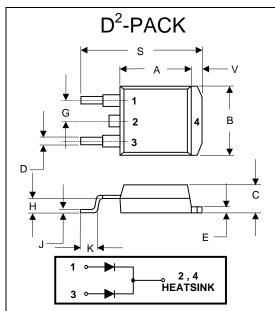
MCC Catalog	Maximum Recurrent	Maximum RMS	Maximum DC
Number	Peak Reverse Voltage	Voltage	Blocking Voltage
MBRB2520CT	20V	14V	20V
MBRB2530CT	30V	21V	30V
MBRB2535CT	35V	24.5V	35V
MBRB2540CT	40V	28V	40V
MBRB2545CT	45V	31.5V	45V
MBRB2560CT	60V	42V	60V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	30 A	T <sub>A</sub> = 130°C
Peak Forward Surge Current	I <sub>FSM</sub>	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage 2520CT-2540CT 2545CT-2560CT	V <sub>F</sub>	.82V .75V	I <sub>FM</sub> = 30 A; per leg I <sub>FM</sub> = 15 A; per leg
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	0.2mA	T <sub>A</sub> = 25°C

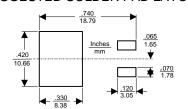
Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.

# **30** Amp **Schottky Barrier Rectifier** 20 to 60 Volts



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
Α	.320	.359	8.13	9.14	
В	.380	.411	9.65	10.45	
С	.160	.190	4.06	4.83	
D	.020	.035	0.51	0.89	
E	.045	.055	1.14	1.40	
G	.095	.105	2.41	2.67	
Н	.096	.120	2.43	3.03	
J	.014	.021	0.35	0.53	
K	.090	.110	2.29	2.79	
S	.575	.625	14.60	15.80	
V	.045	.055	1.14	1.40	

SUGGESTED SOLDER PAD LAYOUT



<sup>\*</sup>Pulse Test: Pulse Width 300 usec, Duty Cycle 1%

### MBRB2520CT thru MBRB2560CT



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Figure 1
Typical Forward Characteristics

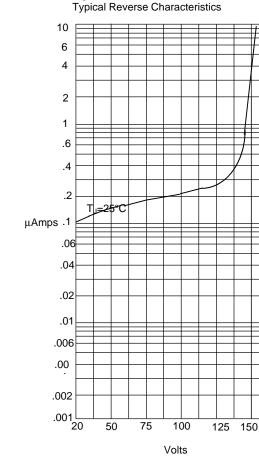
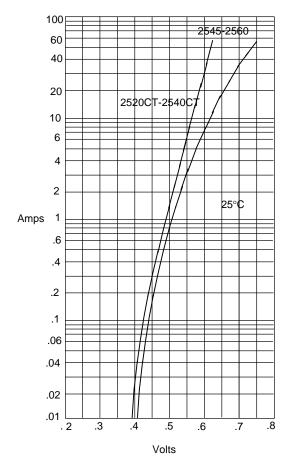
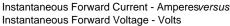


Figure 2



Instantaneous Reverse Leakage Current - MicroAmperesversus Percent Of Rated Peak Reverse Voltage - Volts

175



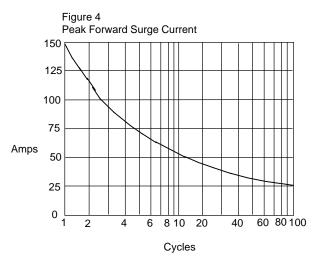
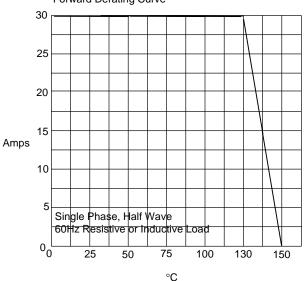


Figure 3 Forward Derating Curve



Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles

Average Forward Rectified Current - Amperes/ersus Ambient Temperature -  $^{\circ}$ C



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# **Ordering Information:**

Device	Packing
Part Number-BP	Tube: 1Kpcs/Box

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Revision: A 3 of 3 2011/01/01