

**Micro Commercial Components** 

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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

# MBRB2520CT THRU MBRB2560CT

# 30 Amp Schottky Barrier Rectifier 20 to 60 Volts

## **Features**

- Guard ring for transient protection
- Low Forward Voltage Drop
- High Current Capability, High Efficiency
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Marking: type number

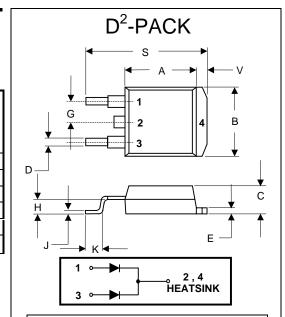
# Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

MCC Catalog Number	Maximum Recurrent Peak Reverse	Maximum RMS Voltage	Maximum DC Blocking
	Voltage	· ·	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

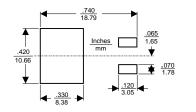
## Electrical Characteristics @ 25°C Unless Otherwise Specified

rectifical characteristics @ 25 c biliess 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			



DIMENSIONS						
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX	NOTE	
Α	.320	.359	8.13	9.14		
В	.380	.411	9.65	10.45		
C	.160	.190	4.06	4.83		
D	.020	.035	0.51	0.89		
Е	.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

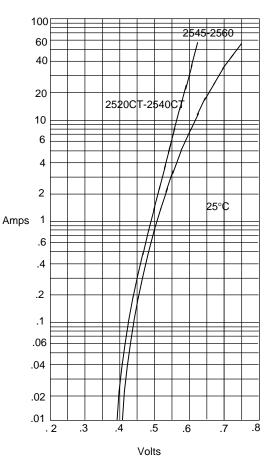


<sup>\*</sup>Pulse Test: Pulse Width 300µsec, Duty Cycle 1%

### MBRB2520CT thru MBRB2560CT

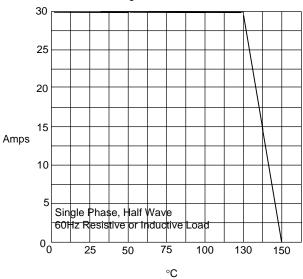


Figure 1
Typical Forward Characteristics



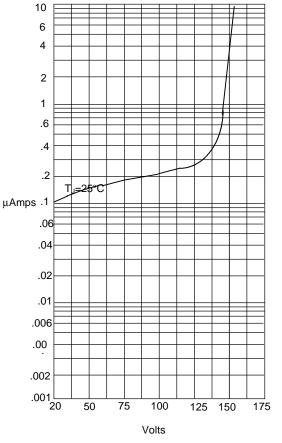
Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts

Figure 3 Forward Derating Curve



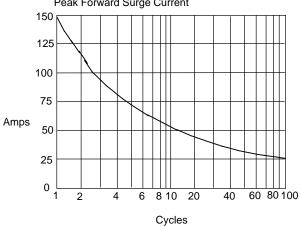
Average Forward Rectified Current - Amperes/ersus Ambient Temperature -°C

Figure 2 Micro Commercial Components
Typical Reverse Characteristics



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

Figure 4
Peak Forward Surge Current



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



#### \*\*\*IMPORTANT NOTICE\*\*\*

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes.
Micro Commercial Components Corp. does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold Micro Commercial Components Corp. and all the companies whose products are represented on our website, harmless against all damages.

#### \*\*\*APPLICATIONS DISCLAIMER\*\*\*

Products offer by *Micro Commercial Components Corp* . are not intended for use in Medical,

Aerospace or Military Applications.