



Micro Commercial Components



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# MBRB2520CT THRU MBRB2560CT

## 30 Amp Schottky Barrier Rectifier 20 to 60 Volts

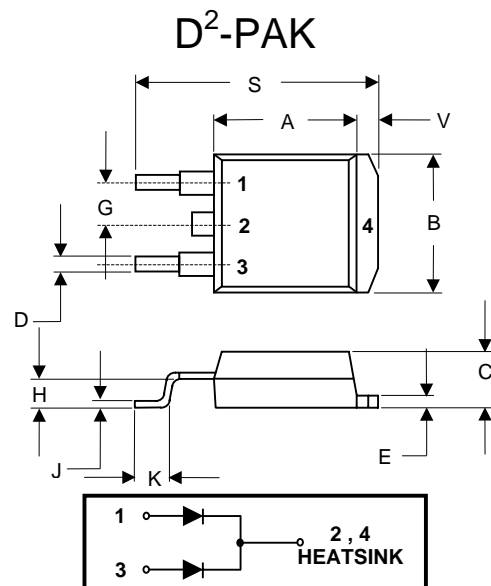
### Features

- Guard ring for transient protection
- Low Forward Voltage Drop
- High Current Capability, High Efficiency
- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking : type number
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information

### Maximum Ratings

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

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

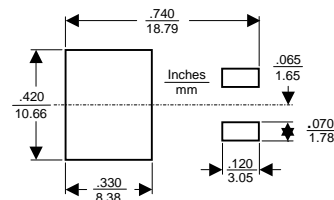
Average Forward Current	$I_{F(AV)}$	30 A	$T_A = 130^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	.82V .75V	$I_{FM} = 30\text{ A; per leg}$ $I_{FM} = 15\text{ A; per leg}$
2520CT-2540CT 2545CT-2560CT			
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.2mA	$T_A = 25^\circ\text{C}$

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

\*Pulse Test: Pulse Width 300µsec, Duty Cycle 1%

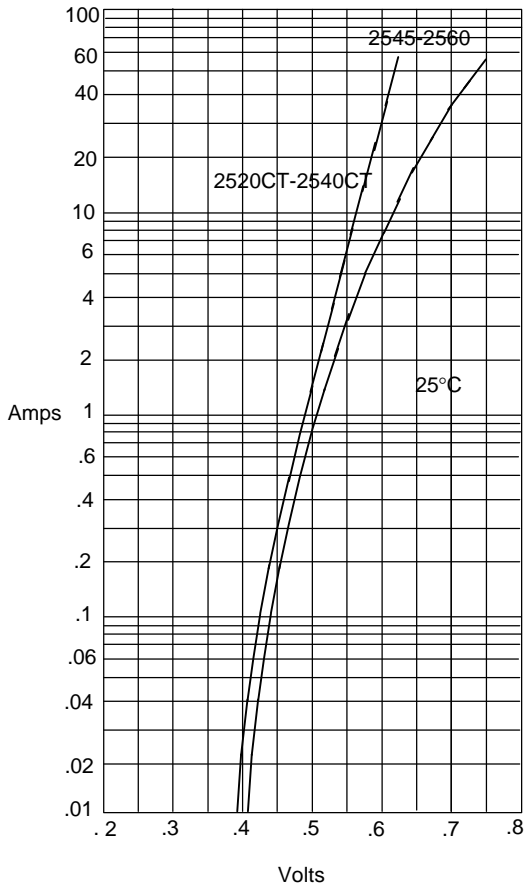
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.320	.359	8.13	9.14	
B	.380	.411	9.65	10.45	
C	.160	.190	4.06	4.83	
D	.020	.035	0.51	0.89	
E	.045	.055	1.14	1.40	
G	.095	.105	2.41	2.67	
H	.096	.120	2.43	3.03	
J	.014	.021	0.35	0.53	
K	.090	.110	2.29	2.79	
S	.575	.625	14.60	15.80	
V	.045	.055	1.14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

### SUGGESTED SOLDER PAD LAYOUT



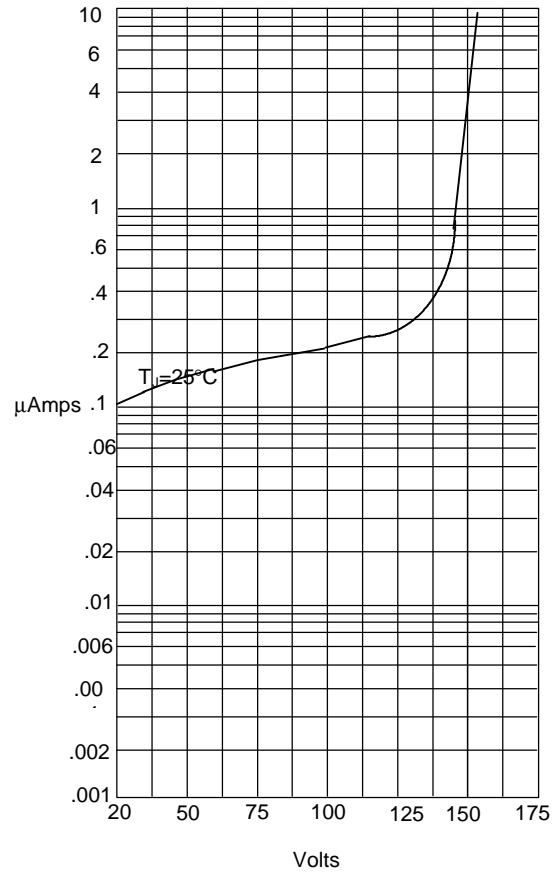
MBRB2520CT thru MBRB2560CT

Figure 1  
Typical Forward Characteristics



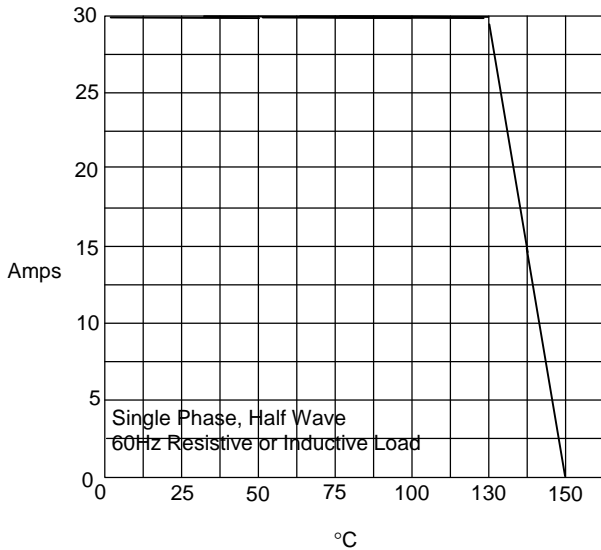
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



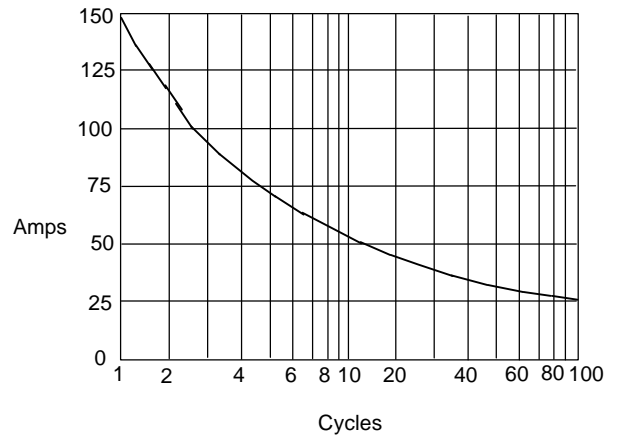
Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

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



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### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 800pcs/Reel
Part Number-BP	Tube: 5Kpcs/Ctn

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

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