Micro Commercial Components

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MBRB3030CT THRU MBRB3060CT

30 Amp Schottky Barrier Rectifier 30 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 +150°C

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRB3030CT	30V	21V	30V
MBRB3040CT	40V	28V	40V
MBRB3045CT	45V	31.5V	45V
MBRB3060CT	60V	42V	60V

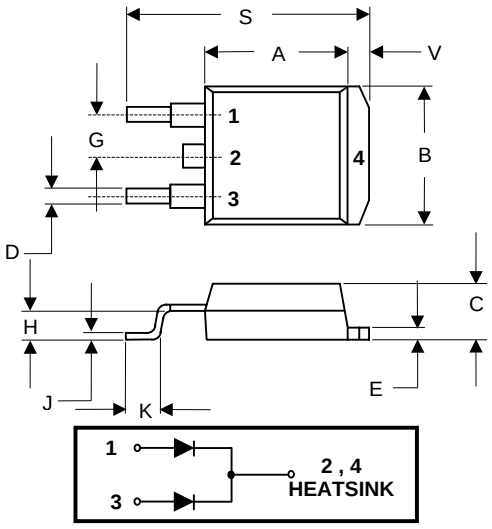
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	30A	T_C = 110℃
Peak Forward Surge Current	I_{FSM}	250A	8.3ms, half sine
Maximum Instantaneous Forward Voltage MBRB3030CT-3045CT MBRB3060CT	V_F	0.55V 0.72V	I_{FM} = 15A; T_C = 25℃
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	1.0mA 75mA	T_C = 25℃ T_C = 125℃
Typical Junction Capacitance	C_J	420pF	Measured at 1.MHz, V_R=4V

*Pulse Test: Pulse Width 300μsec, Duty Cycle 2%

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

D^2-PAK



DIM	INCHES MIN	INCHES MAX	MM MIN	MM MAX	NOTE
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

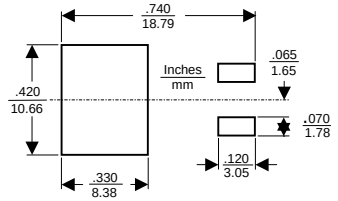
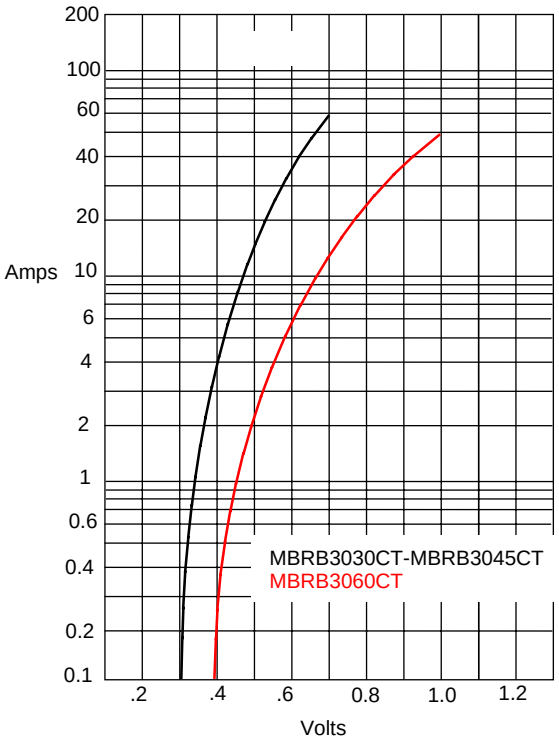
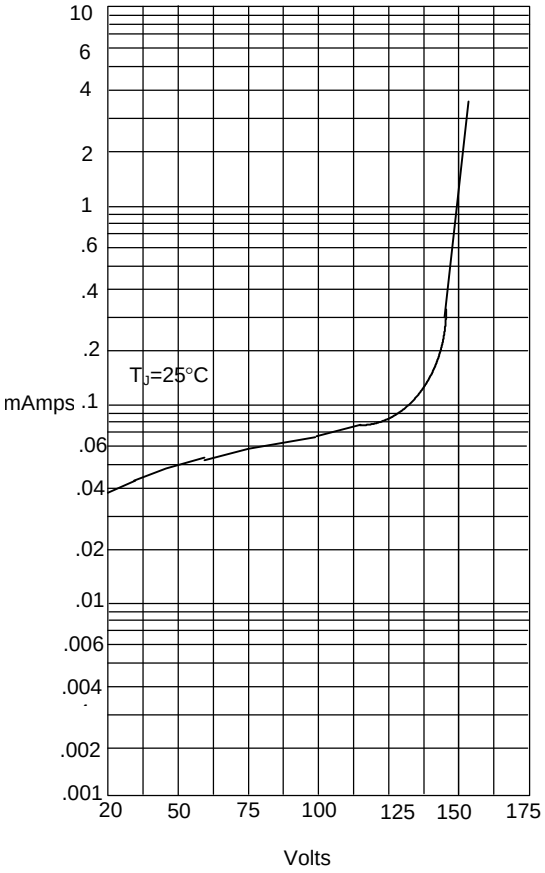


Figure 1
Typical Forward Characteristics



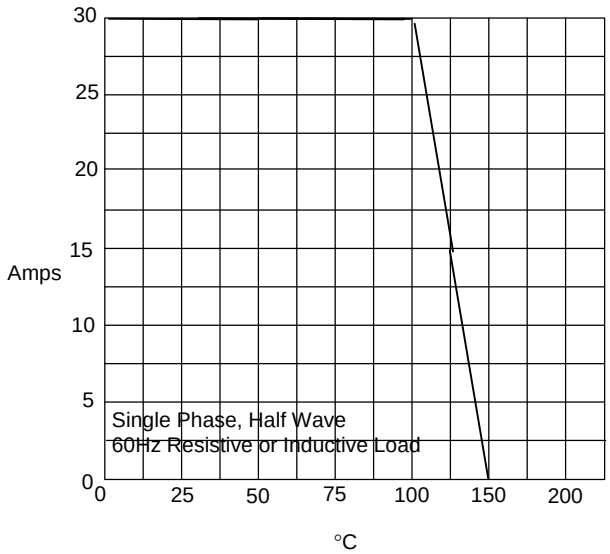
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



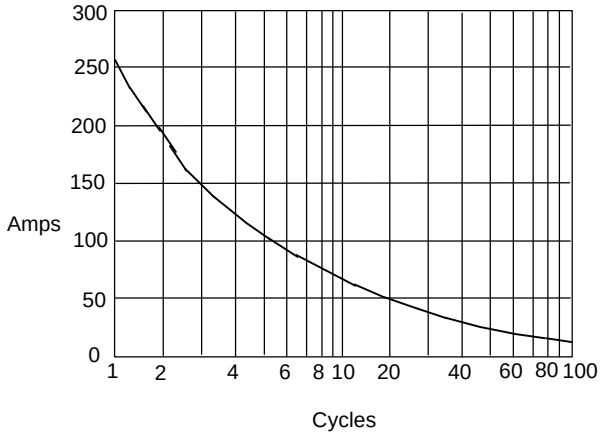
Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



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

Figure 4
Peak Forward Surge Current



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

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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