



Micro Commercial Components



Micro Commercial Components
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MBRB3030CT THRU MBRB3060CT

Features

- Halogen free available upon request by adding suffix "-HF"
- Guard ring for transient protection
- Low Power Loss , High Efficiency
- High Current Capability
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Marking : type number

Maximum Ratings

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Operating Junction 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

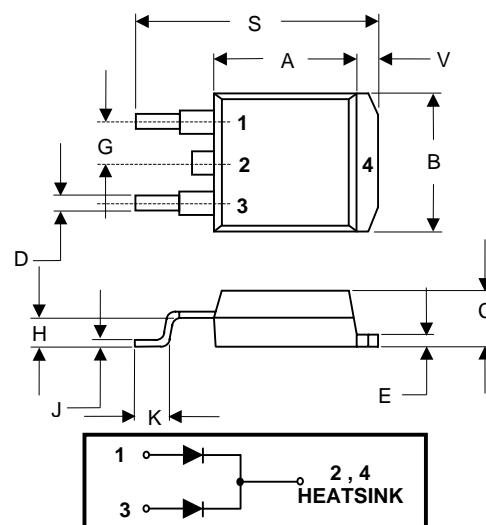
Average Forward Current	$I_{F(AV)}$	30A	$T_C = 110^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	250A	8.3ms, half sine
Maximum Instantaneous Forward Voltage MBRB3030CT-3045CT MBRB3060CT	V_F	0.55V 0.72V	$I_{FM} = 15A$; $T_C = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	1.0mA 75mA	$T_C = 25^\circ\text{C}$ $T_C = 125^\circ\text{C}$
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.

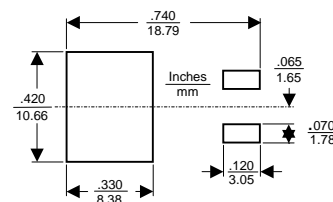
30 Amp Schottky Barrier Rectifier 30 to 60 Volts

D²-PACK



DIM	INCHES		MM		NOTE
	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



MBRB3030CT thru MBRB3060CT

Figure 1
Typical Forward Characteristics

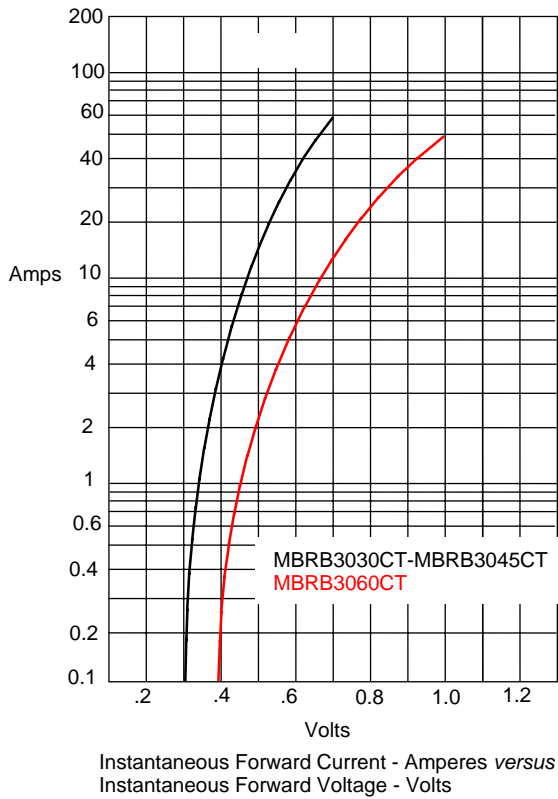


Figure 2
Typical Reverse Characteristics

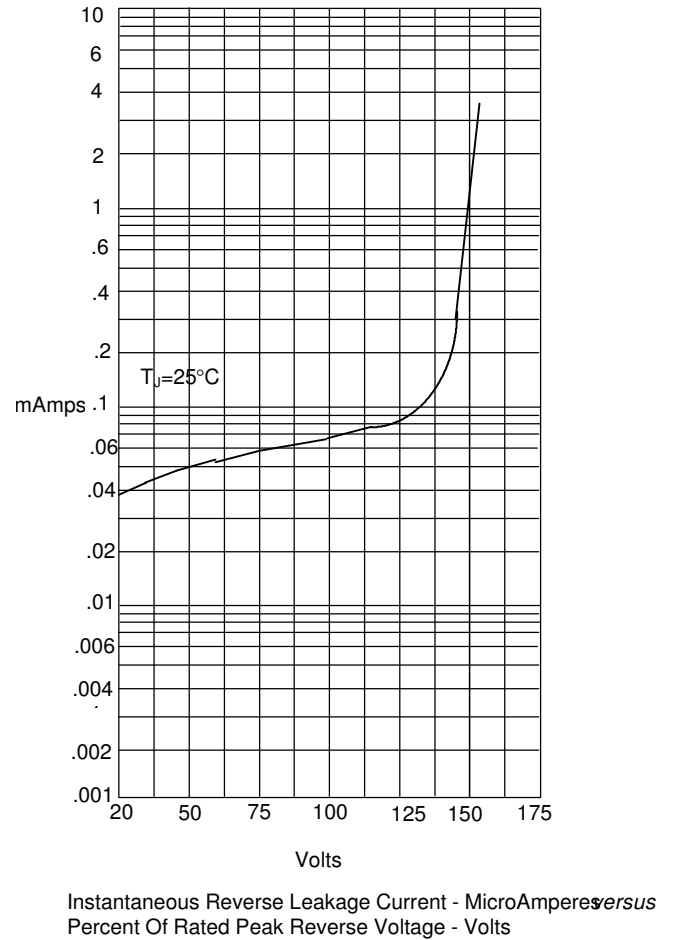


Figure 3
Forward Derating Curve

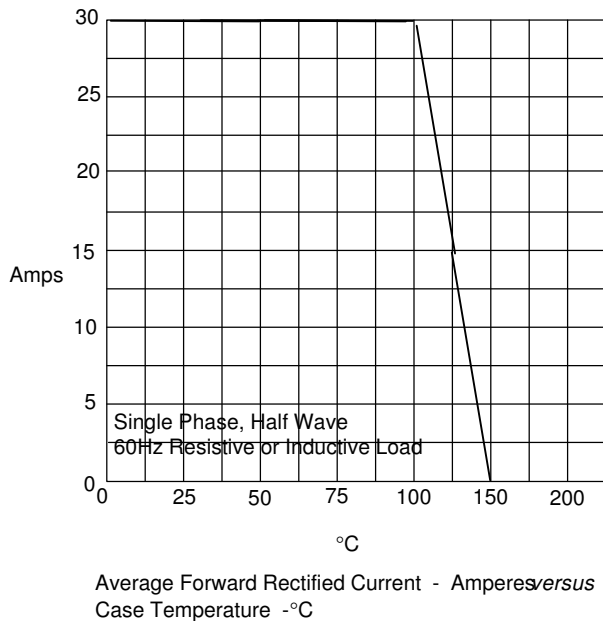
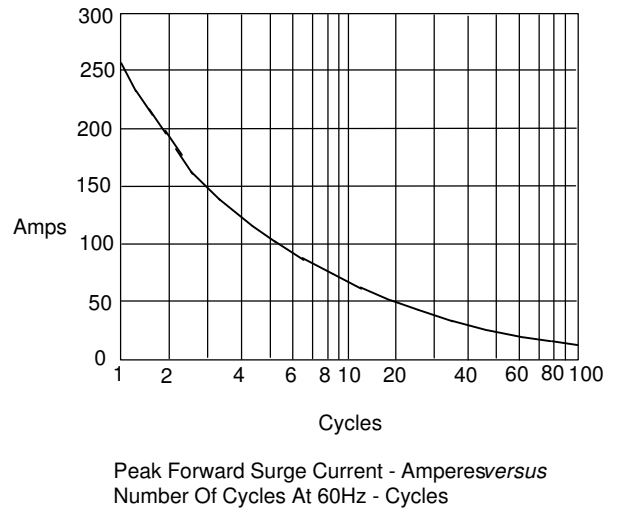


Figure 4
Peak Forward Surge Current





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Ordering Information :

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

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

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