



Micro Commercial Components



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# MBR30100CT

**30 Amp  
 Schottky Barrier  
 Rectifier  
 100 Volts**

## Features

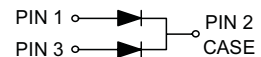
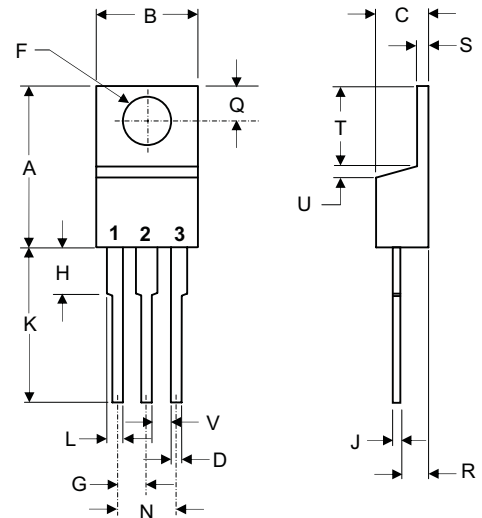
- Halogen free available upon request by adding suffix "-HF"
- Metal of siliconrectifier, majority carrier conduction
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- High surge capacity, High current capability
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

## Maximum Ratings

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

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR30100CT	MBR30100CT	100V	70V	100V

## TO-220AB



## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	30A	$T_C = 125^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	250A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	.85V	$T_J = 25^\circ\text{C}$ $I_{FM} = 15\text{A};$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	500uA 7mA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$

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

DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.140	.190	3.56	4.82	
D	.020	.045	0.51	1.14	
F	.139	.161	3.53	4.09	∅
G	.190	.110	2.29	2.79	
H	---	.250	---	6.35	
J	.012	.025	0.30	0.64	
K	.500	.580	12.70	14.73	
L	.045	.060	1.14	1.52	
N	.190	.210	4.83	5.33	
Q	.100	.135	2.54	3.43	
R	.080	.115	2.04	2.92	
S	.045	.055	1.14	1.39	
T	.230	.270	5.84	6.86	
U	---	.050	---	1.27	
V	.045	---	1.15	---	

**RATING AND CHARACTERISTIC CURVES**  
**MBR30100CT**

FIG.1 - FORWARD CURRENT DERATING CURVE

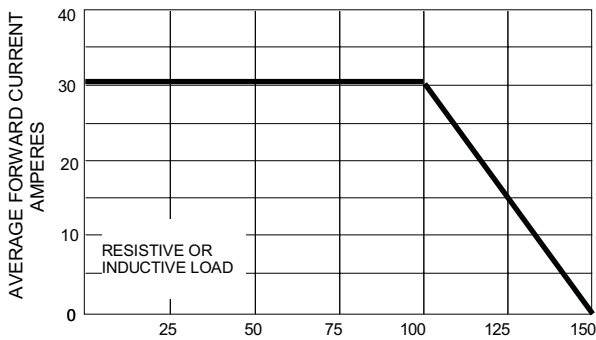
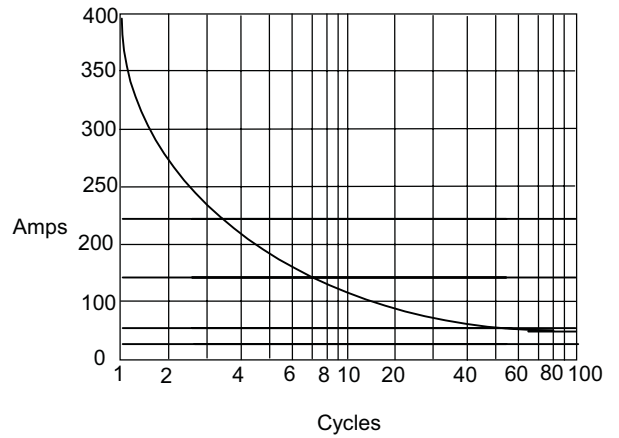
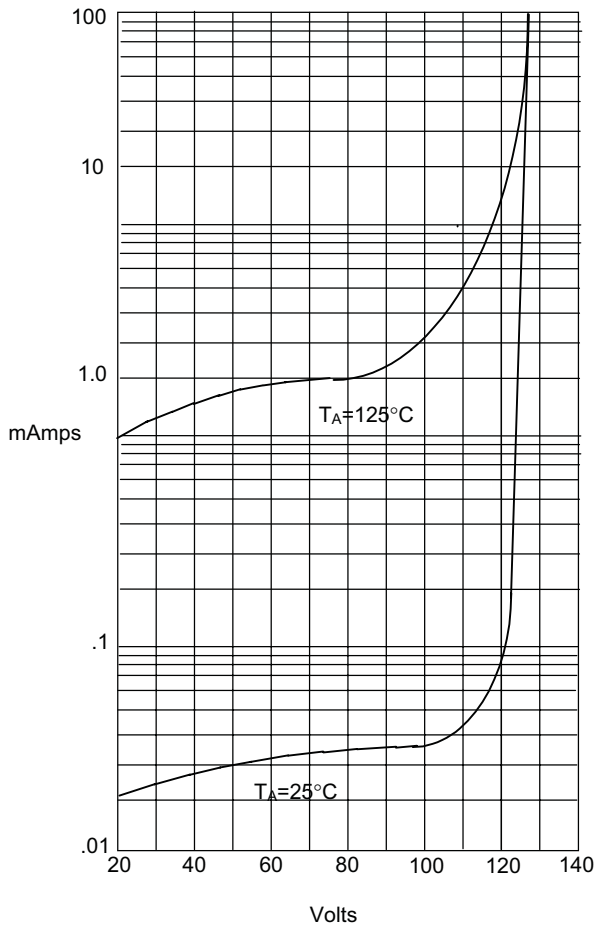


Figure 2  
Peak Forward Surge Current



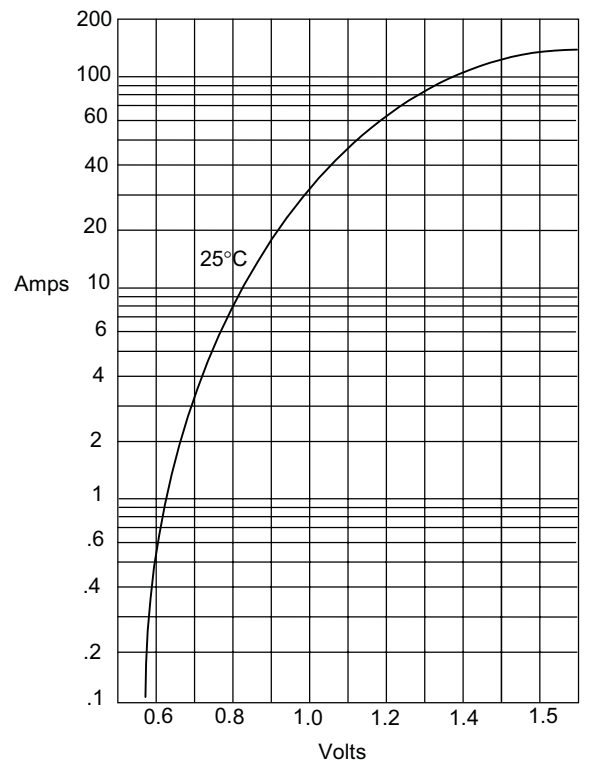
Peak Forward Surge Current - Amperes versus  
Number Of Cycles At 60Hz - Cycles

Figure 3  
Typical Reverse Characteristics



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

Figure 4  
Typical Forward Characteristics



Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts



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### Ordering Information :

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

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

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