



Micro Commercial Components

Micro Commercial Components  
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# MBR10150CT

## Features

- High Junction Temperature Capability
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Low Leakage Current
- Marking : type number
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

## Maximum Ratings

- Operating Junction Temperature : 150°C
- Storage Temperature: - 50°C to +150°C
- Per diode Thermal Resistance 4°C/W Junction to Case

MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR 10150 CT	150 V	105V	150 V

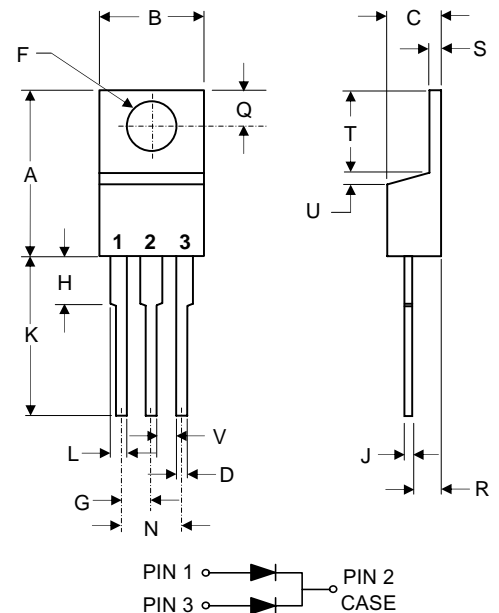
## 10 Amp High Voltage Power Schottky Barrier Rectifier 150Volts

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	10 A	$T_C = 125^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	120A	8.3ms half sine
Maximum Instantaneous Forward Voltage MBR10150CT	$V_F$	.92V  .75V	$I_{FM} = 5A$ $T_J = 25^\circ\text{C}$ $I_{FM} = 5A$ $T_J = 125^\circ\text{C}$
Maximum Reverse Current At Rated DC Blocking Voltage	$I_R$	50uA 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.

## TO-220AB

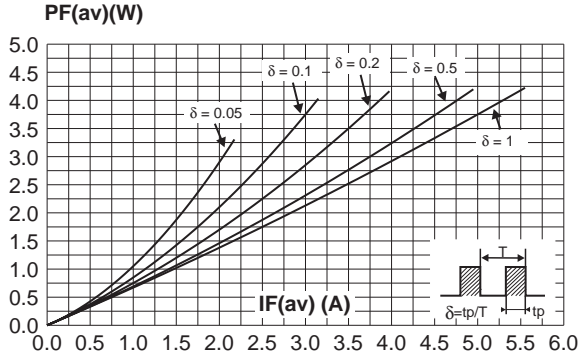


DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.140	.190	3.56	4.82	
D	.020	.045	0.51	1.14	
F	.139	.161	3.53	4.09	∅
G	.190	.110	2.29	2.79	
H	---	.250	---	6.35	
J	.012	.025	0.30	0.64	
K	.500	.580	12.70	14.73	
L	.045	.060	1.14	1.52	
N	.190	.210	4.83	5.33	
Q	.100	.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	----	

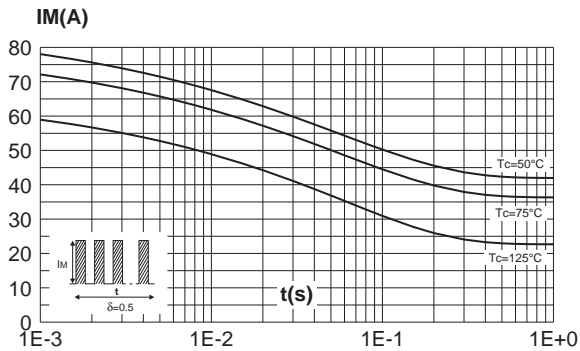
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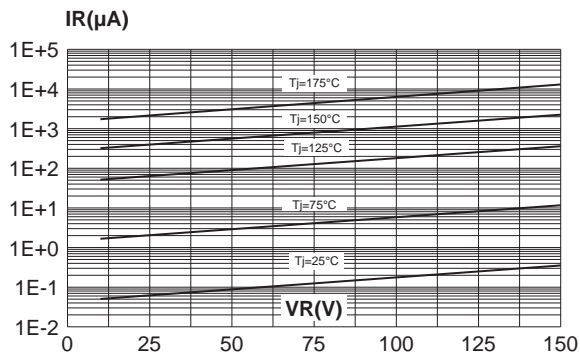
**Fig. 1:** Average forward power dissipation versus average forward current (per diode).



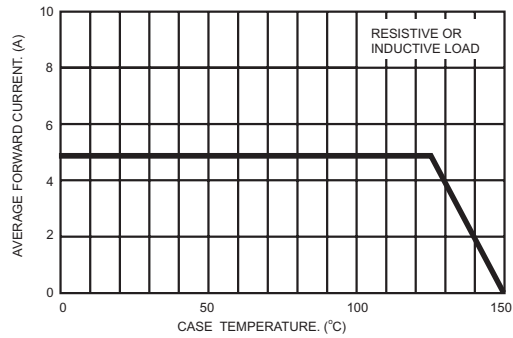
**Fig. 3:** Non repetitive surge peak forward current versus overload duration (maximum values, per diode).



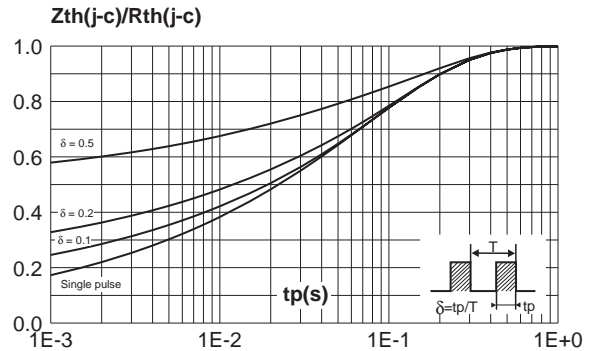
**Fig. 5:** Reverse leakage current versus reverse voltage applied (typical values, per diode)



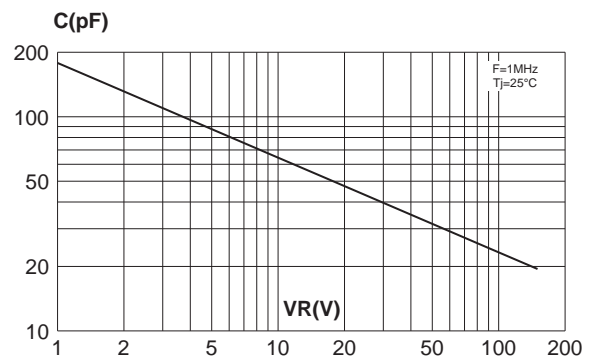
**FIG.2-** FORWARD CURRENT DERATING CURVE



**Fig. 4:** Relative variation of thermal impedance junction to case versus pulse duration (per diode).



**Fig. 6:** Junction capacitance versus reverse voltage applied (typical values, per diode).

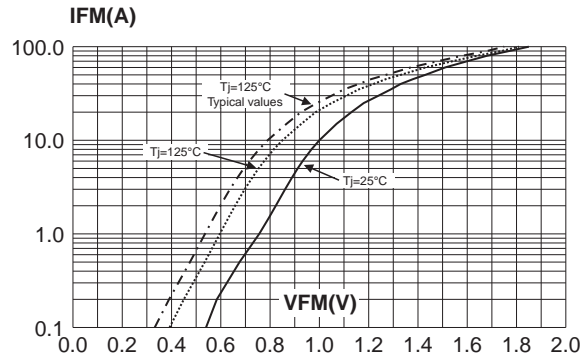


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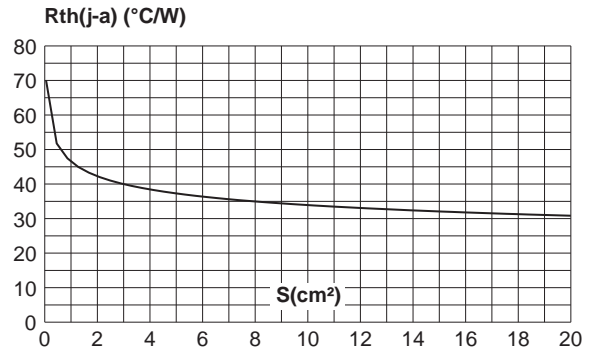


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**Fig. 7:** Forward voltage drop versus forward current (maximum values, per diode).



**Fig. 8:** Thermal resistance junction to ambient versus copper surface under tab (Epoxy printed circuit board, copper thickness: 35µm)





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## Ordering Information

Device	Packing
(Part Number)-BP	Bulk;1Kpcs/Box

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