

Features

- Halogen Free. "Green" Device (Note 1)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Pb-Free Package
- Extremely Fast Switching
- Extremely Low Forward Drop
- Lead Free Finish/RoHS Compliant(Note 2) ("P" Suffix Designates Compliant. See Ordering Information)

Maximum Ratings

- Operating Junction Temperature Range: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Thermal Resistance: 5°C/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRD10100CTS	MBRD10100CTS	100V	70V	100V
MBRD10150CTS	MBRD10150CTS	150V	105V	150V
MBRD10200CTS	MBRD10200CTS	200V	140V	200V

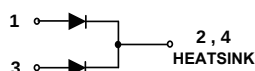
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Rectified Current	$I_{F(AV)}$	10A	$T_C = 110^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	100A	8.3ms, Half Sine
Maximum Peak Forward Voltage	V_{FM}	0.83V 0.70V 0.88V 0.75V 0.93V 0.80V	$I_{FM}=5.0\text{A}; T_J=25^\circ\text{C}$ $I_{FM}=5.0\text{A}; T_J=125^\circ\text{C}$ $I_{FM}=5.0\text{A}; T_J=25^\circ\text{C}$ $I_{FM}=5.0\text{A}; T_J=125^\circ\text{C}$ $I_{FM}=5.0\text{A}; T_J=25^\circ\text{C}$ $I_{FM}=5.0\text{A}; T_J=125^\circ\text{C}$
Maximum Peak Reverse Current	I_{RM}	0.01mA 1mA	$T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$
Typical Junction Capacitance	C_J	250pF 100pF 75pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

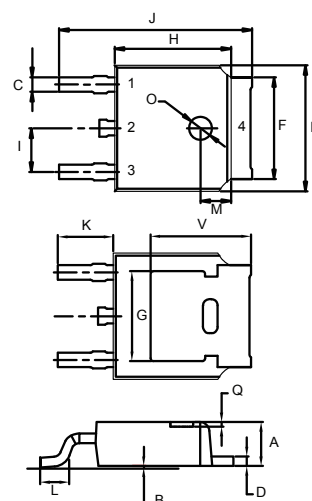
2. High temperature solder exemption applied, see EU directive annex 7a.

Internal Structure:



10 Amp Schottky Rectifier 100~200 Volts

(TO-252) DPAK



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.087	0.094	2.20	2.40	
B	0.000	0.005	0.00	0.13	
C	0.026	0.034	0.66	0.86	
D	0.018	0.023	0.46	0.58	
E	0.256	0.264	6.50	6.70	
F	0.201	0.215	5.10	5.46	
G	0.190		4.83		
H	0.236	0.244	6.00	6.20	
I	0.086	0.094	2.18	2.39	
J	0.386	0.409	9.80	10.40	
K	0.114		2.90		
L	0.055	0.067	1.40	1.70	
M	0.063		1.60		
O	0.043	0.051	1.10	1.30	
Q	0.000	0.012	0.00	0.30	
V	0.211		5.35		

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

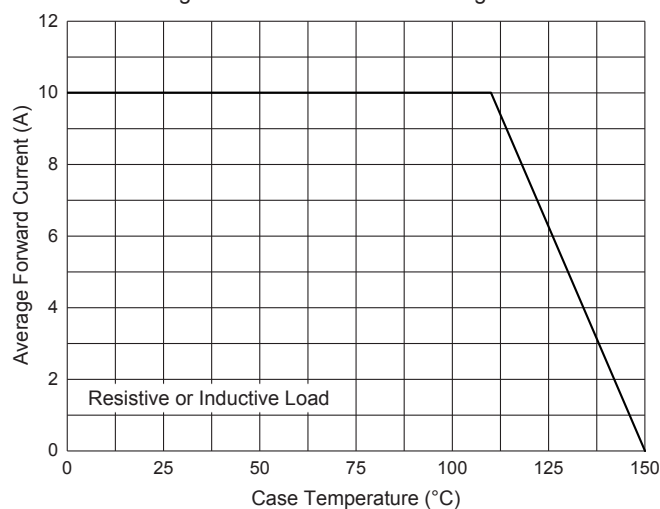


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

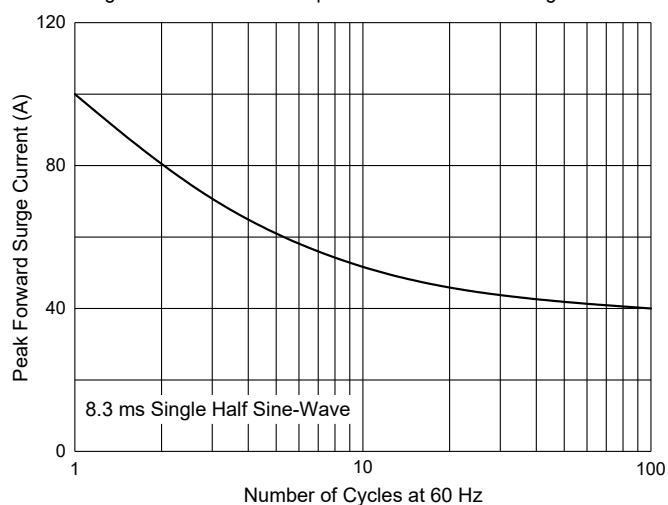


Fig. 3 - Typical Instantaneous Forward Characteristics

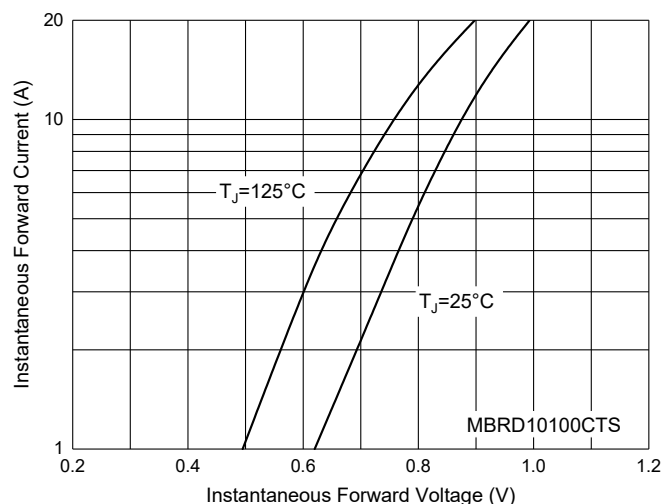


Fig. 4 - Typical Instantaneous Forward Characteristics

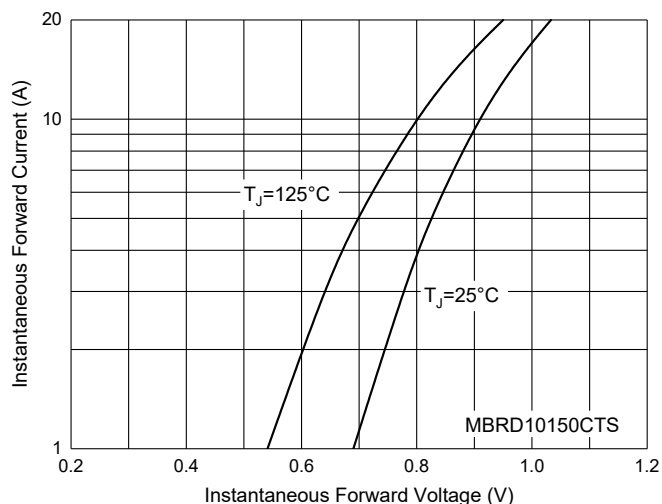


Fig. 5 - Typical Instantaneous Forward Characteristics

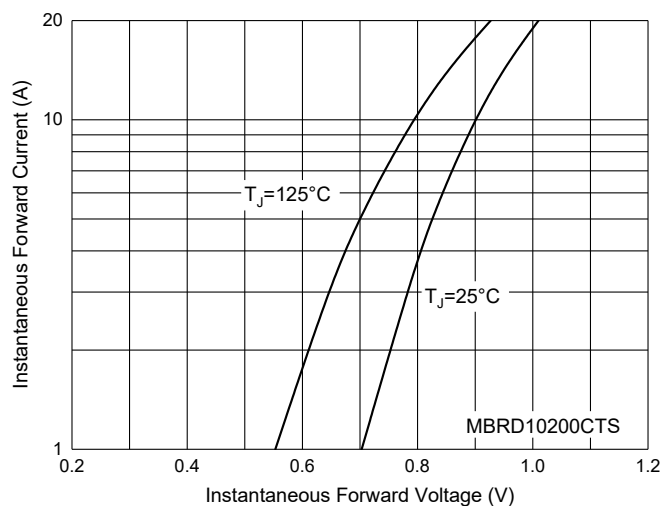
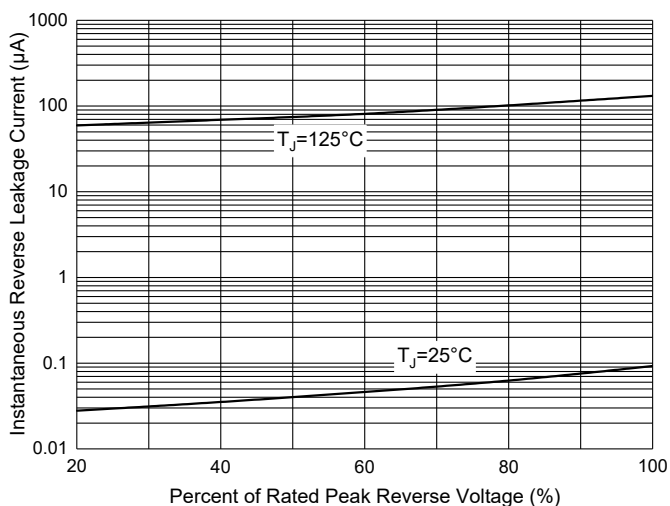


Fig. 6 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel

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