

## Features

- Guard Ring For Transient Protection
- High Current Capability, High Efficiency
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating

## Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +175°C
- Typical thermal resistance: 2.0°C/W Junction to Case
- Mounting Torque: 5 in-lbs Maximum

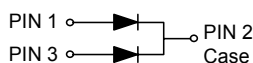
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR2520CT	MBR2520CT	20V	14V	20V
MBR2530CT	MBR2530CT	30V	21V	30V
MBR2535CT	MBR2535CT	35V	24.5V	35V
MBR2540CT	MBR2540CT	40V	28V	40V
MBR2545CT	MBR2545CT	45V	31.5V	45V
MBR2560CT	MBR2560CT	60V	42V	60V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	25A	$T_C=130^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	150A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage MBR2520CT~2545CT MBR2560CT	$V_F$	0.65V 0.75V	$I_{FM}=12.5\text{A}; T_J=25^\circ\text{C}$ $I_{FM}=12.5\text{A}; T_J=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.2mA	$T_J=25^\circ\text{C}$
Typical Junction Capacitance	$C_J$	450pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

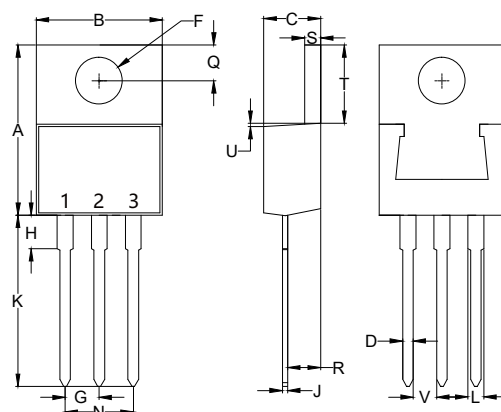
Note :1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

## Internal Structure



# 25 Amp Schottky Barrier Rectifier 20 to 60 Volts

## TO-220AB



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.560	0.625	14.22	15.88	
B	0.380	0.429	9.65	10.90	
C	0.140	0.201	3.56	5.10	
D	0.020	0.045	0.51	1.14	
F	0.131	0.170	3.34	4.31	Φ
G	0.079	0.121	2.01	3.07	
H	-----	0.250	-----	6.35	
J	0.011	0.025	0.28	0.64	
K	0.500	0.580	12.70	14.73	
L	0.045	0.060	1.14	1.52	
N	0.158	0.242	4.02	6.14	
Q	0.087	0.135	2.22	3.43	
R	0.080	0.126	2.04	3.19	
S	0.045	0.055	1.14	1.39	
T	0.230	0.270	5.84	6.86	
U	-----	0.050	-----	1.27	
V	0.045	-----	1.15	-----	

## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

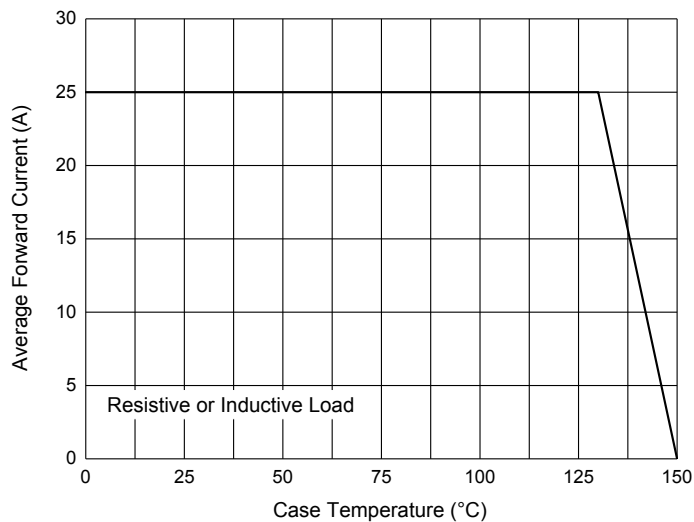


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

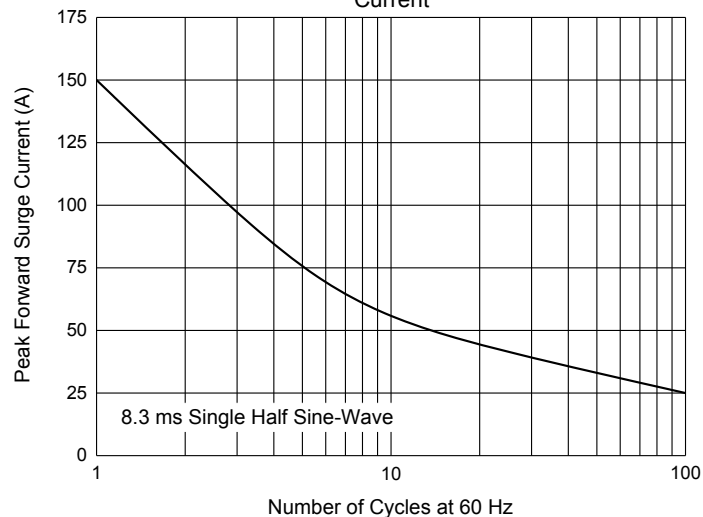


Fig. 3 - Typical Instantaneous Forward Characteristics

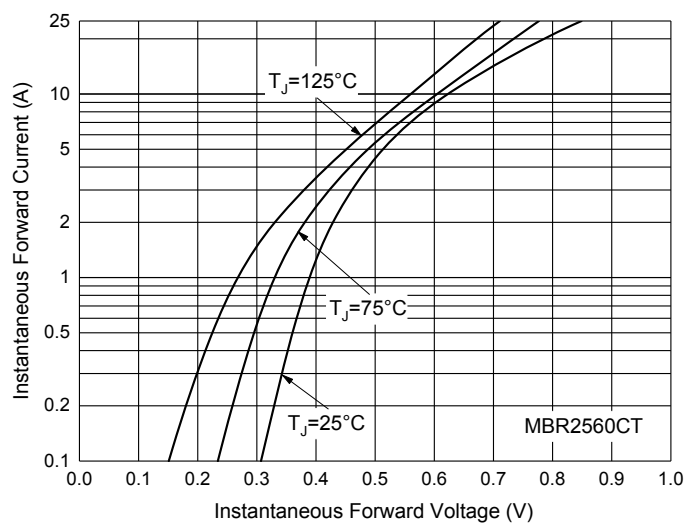
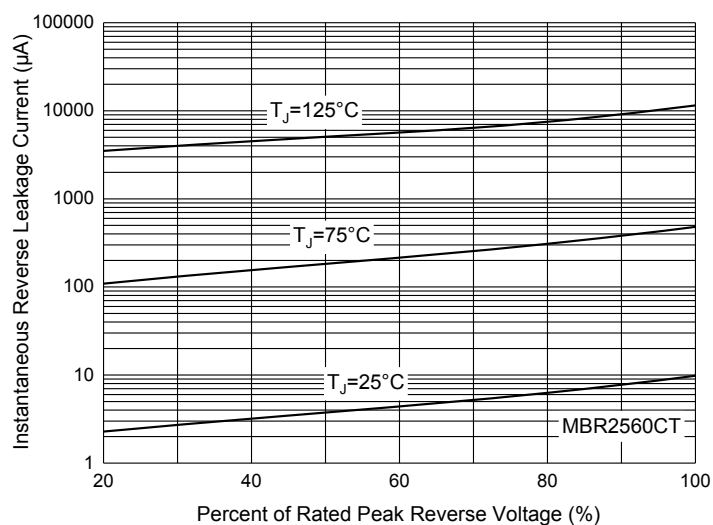


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

Device	Packing
Part Number-BP	Bulk:50pcs/Tube, 1Kpcs/Box, 5Kpcs/Carton

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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