Features

- Guard Ring For Transient Protection
- Low Forward Voltage Drop
- High Current Capability and High Efficiency
- Halogen Free. "Green" Device (Note 1)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant(Note 2) ("P" Suffix Designates RoHS Compliant. See Ordering Information)

25 Amp Schottky Barrier Rectifier 20 to 60 Volts

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +175°C
- Typical Thermal Resistance: 2 °C/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRB2520CT	MBRB2520CT	20V	14V	20V
MBRB2530CT	MBRB2530CT	30V	21V	30V
MBRB2535CT	MBRB2535CT	35V	24.5V	35V
MBRB2540CT	MBRB2540CT	40V	28V	40V
MBRB2545CT	MBRB2545CT	45V	31.5V	45V
MBRB2560CT	MBRB2560CT	60V	42V	60V

Electrical Characteristics @ 25°C Unless Otherwise Specified

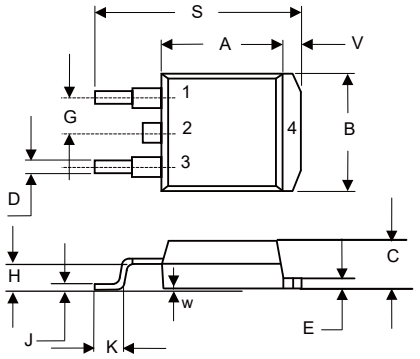
Average Forward Current	$I_{F(AV)}$	25A	T_C=130ºC
Peak Forward Surge Current	I_{FSM}	150A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage MBRB2520CT~2545CT MBRB2560CT	V_F	0.65V 0.75V	I_{FM}=12.5A; T_J=25ºC I_{FM}=12.5A; T_J=25ºC
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	0.2mA	T_J=25ºC
Typical Junction Capacitance	C_J	450pF	Measured at 1.0MHz, V_R=4.0V

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



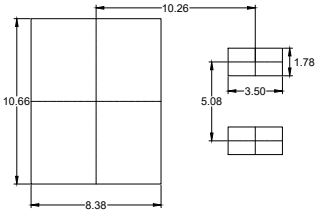
D²-PAK



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.331	0.370	8.40	9.40	
B	0.378	0.417	9.60	10.60	
C	0.165	0.189	4.20	4.80	
D	0.027	0.037	0.68	0.94	
E	0.045	0.055	1.14	1.40	
G	0.10		2.54		TYP.
H	0.096	0.134	2.43	3.40	
J	0.011	0.025	0.28	0.64	
K	0.071	0.131	1.80	3.32	
S	0.575	0.625	14.60	15.87	
V	0.042	0.058	1.07	1.47	
W	0.000	0.010	0.00	0.25	

Solder Pad Layout

Unit:mm



Curve Characteristics

Fig. 1 - Forward Current Derating Curve

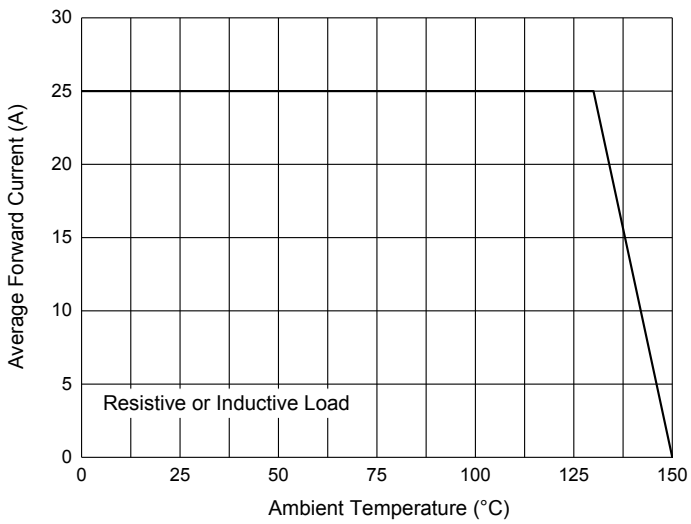


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

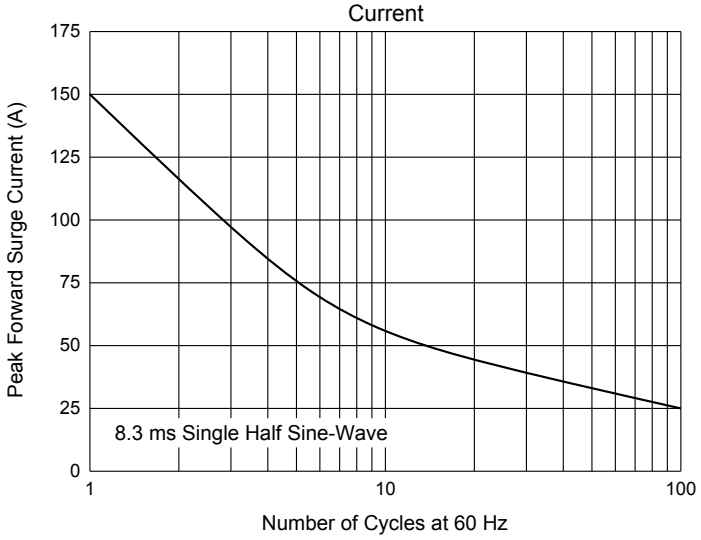


Fig. 3 - Typical Instantaneous Forward Characteristics

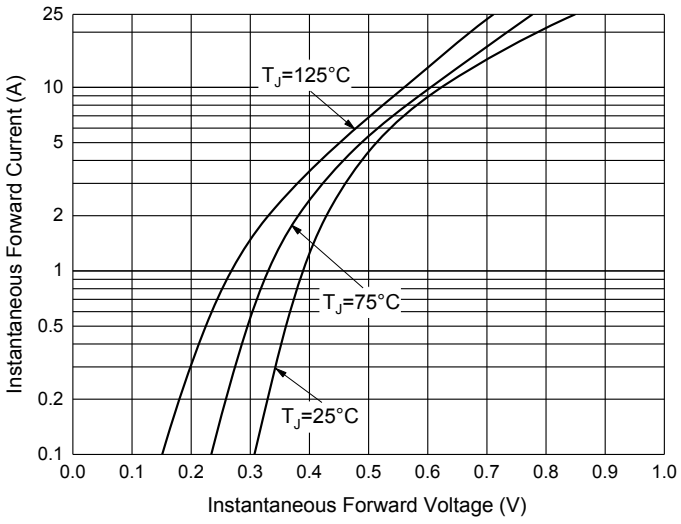
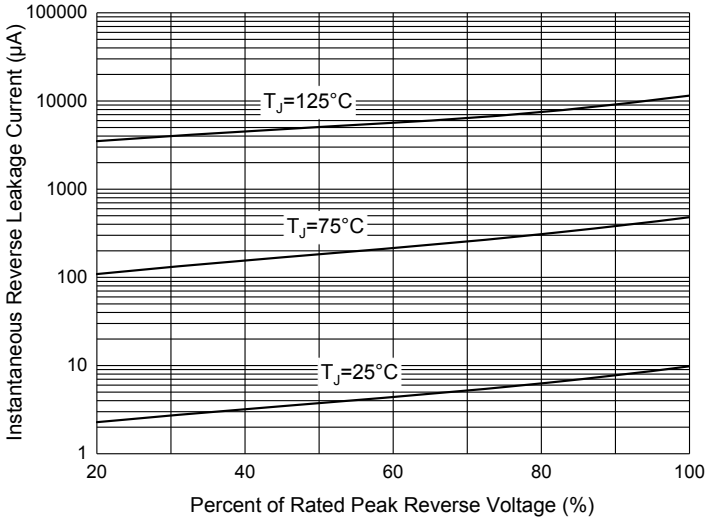


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 800pcs/Reel
Part Number-BP	Tube: 5Kpcs/Ctn

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