



Micro Commercial Components
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MBRB1030CT THRU MBRB1045CT

Features

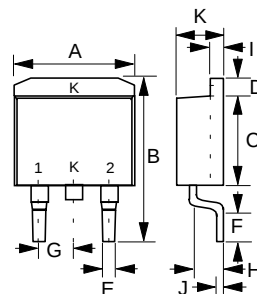
- Meatl of Silicon Rectifier, Majority Conduction
- Guard ring for transient protection
- Low Forward Voltage Drop
- High Current Capability, High Efficiency
- Low Power Loss

Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C

MCC Catalog Number	Maximum Reccurent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRB1030CT	30V	21V	30V
MBRB1035CT	35V	24.5V	35V
MBRB1040CT	40V	28V	40V
MBRB1045CT	45V	31.5V	45V

D²PAK



PIN 1 K
PIN 2 HEATSINK

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	10 A	$T_C = 95^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	125A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	.55V	$I_{FM} = 5A$; $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	0.5mA	$T_J = 25^\circ\text{C}$
Typical Junction Capacitance	C_J	200pF	Measured at 1.0MHz, $V_R=4.0V$

*Pulse Test: Pulse Width 300μsec, Duty Cycle 1%

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.380	.421	9.65	10.69	
B	.575	.625	14.60	15.88	
C	.325	.364	8.25	9.25	
D	.045	.055	1.14	1.40	
E	.020	.045	0.51	1.14	
F	.090	.110	2.29	2.79	
G	.090	.110	2.29	2.79	
H	.080	.115	2.03	2.92	
I	.045	.055	1.14	1.40	
J	.012	.025	0.30	0.64	
K	.172	.190	4.37	4.83	

FIG.1 - FORWARD CURRENT DERATING CURVE

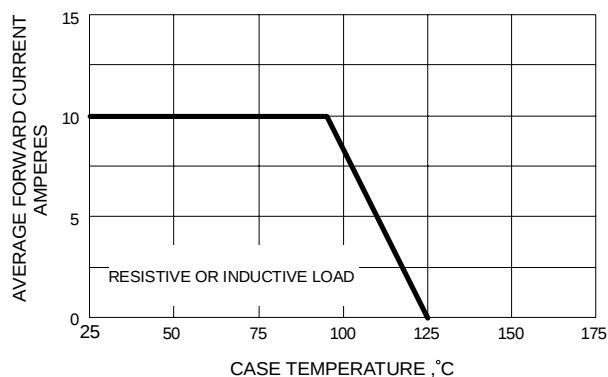


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

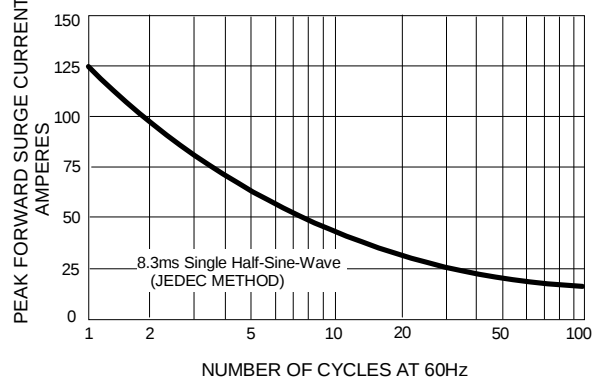


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

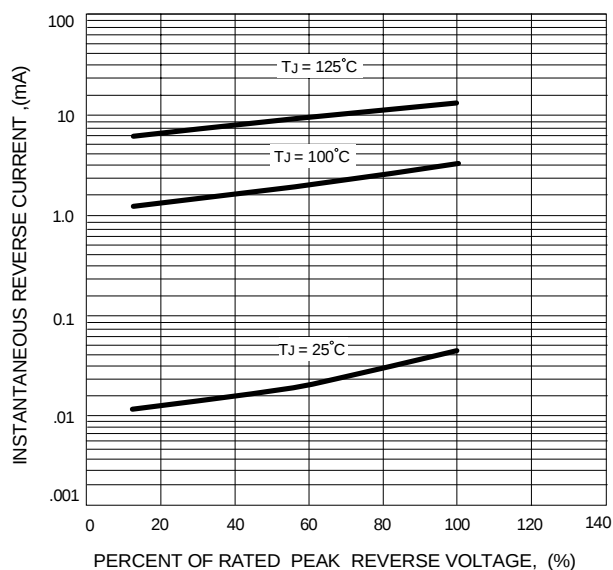


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

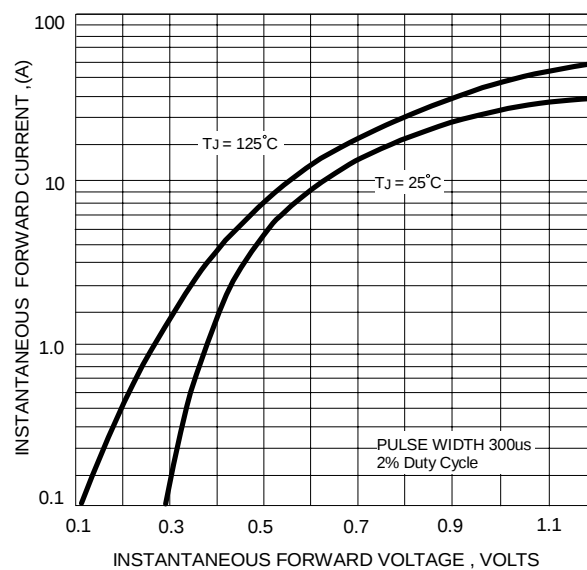


FIG.5 - TYPICAL JUNCTION CAPACITANCE

