

Features

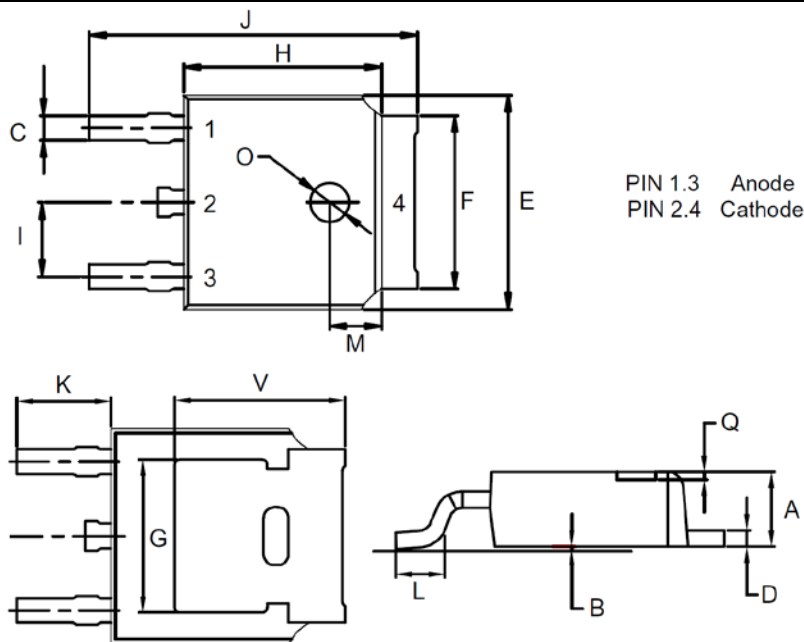
- * Epoxy meets UL 94 V-0 flammability rating
- * Moisture Sensitivity Level 1
- * Extremely Fast Switching
- * Extremely Low Forward Drop



Mechanical Data

- * Cases: TO-252 Molded plastic
- * Terminal: Matte tin plated leads, solderable per JESD22-B102 Meet JESD 201 class 1A whisker test
- * Polarity: As marked

Package Outline Dimensions



DIM	DIMENSIONS			
	INCHES		MM	
	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	

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	Symbol	MBRD 1020CT	MBRD 1030CT	MBRD 1045CT	MBRD 1050CT	MBRD 1060CT	MBRD 1080CT	MBRD 1010CT	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	45	50	60	80	100	V
Maximum RMS Voltage	V _{RMS}	14	21	32	35	42	57	71	V
Maximum D.C Blocking Voltage	V _{DC}	20	30	45	50	60	80	100	V
Maximum Average Forward Rectified Current	I _{F(AV)}	10							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	150							A
Maximum instantaneous forward voltage IF= 10 A	V _F	0.55			0.75		0.80	0.85	V
Maximum reverse current T _J =25 °C @ rated VR T _J =125 °C	I _R	0.5							mA
		50			25				
Typical Thermal Resistance	R _{θJC}	2.5							°C/W
Operating and Storage Temperature Range	T _J /T _{STG}	-55 to +150							°C

Ratings and Characteristic Curves

FIG.1-FORWARD CURRENT DERATING CURVE

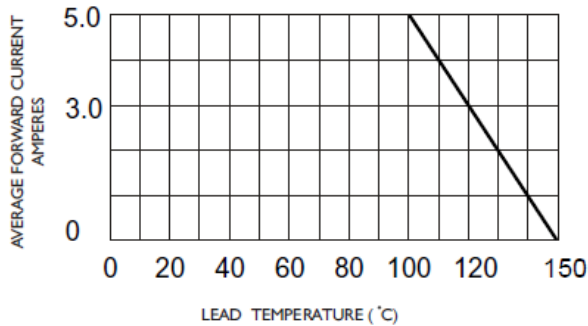


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

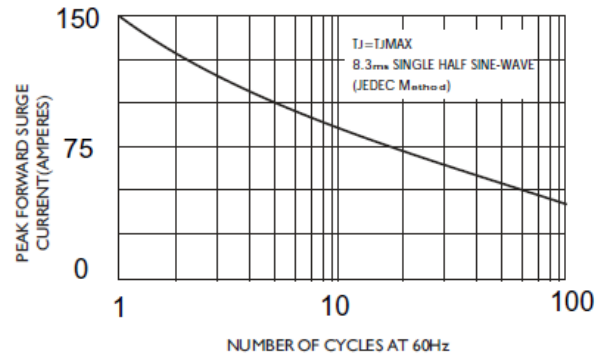


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

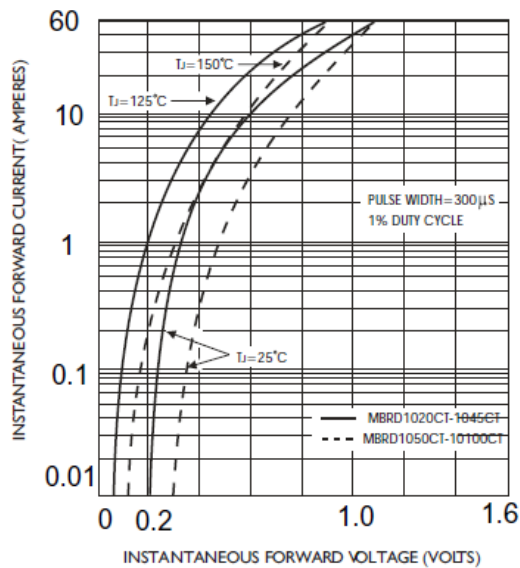


FIG.4-TYPICAL REVERSE CHARACTERISTICS

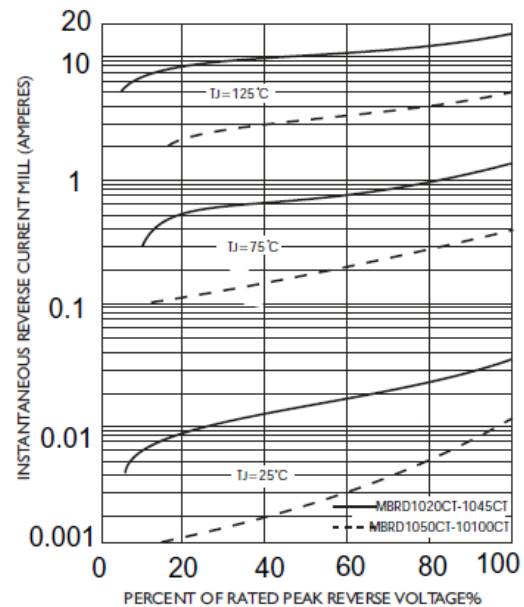


FIG.5-TYPICAL JUNCTION CAPACITANCE

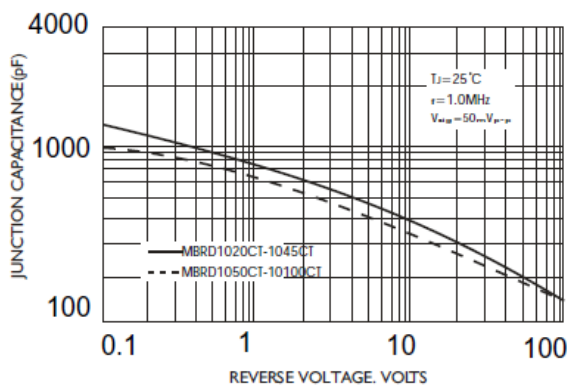
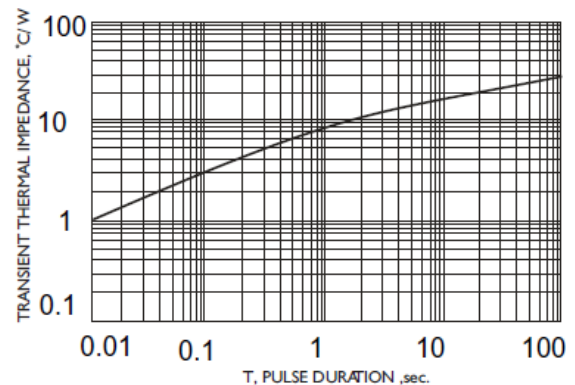


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE





MBRD1020CT THRU MBRD10100CT

10 Amps Schottky Rectifiers

Ordering Information

Part No.	Package	Packing
MBRD1020CT~MBRD10100CT	TO-252	2.5K/Reel