



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Micro Commercial Components



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# MBRD1020CT Thru MBRD10100CT

## Features

- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Extremely Fast Switching
- Extremely Low Forward Drop.
- Lead Free Finish/Rohs Compliant ("P" Suffix designates Compliant. See ordering information)

## Maximum Ratings

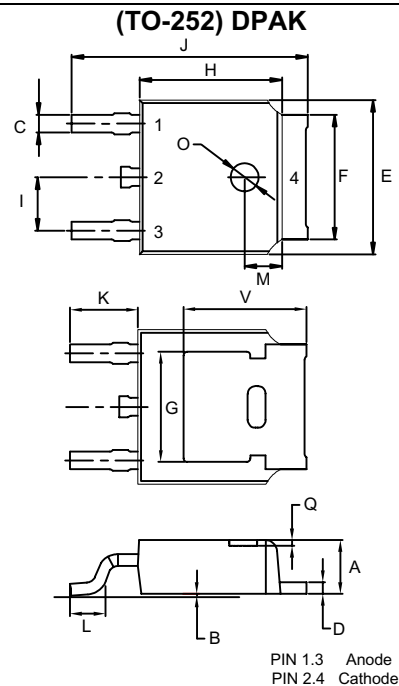
- Operating Temperature( $T_J$ ): -65°C to +150°C
- Storage Temperature( $T_{STG}$ ): -65°C to +150°C

MCC Part Number	Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRD1020CT	20	14	20
MBRD1030CT	30	21	30
MBRD1045CT	45	32	45
MBRD1050CT	50	35	50
MBRD1060CT	60	42	60
MBRD1080CT	80	57	80
MBRD10100CT	100	71	100

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Max average forward rectified current	$I_{(AV)}$	10A	
Max surge current	$I_{FSM}$	150A	8.3ms, half sine
Peak forward voltage MBRD1020CT-45CT MBRD1050CT-60CT MBRD1080CT MBRD10100CT	$V_{FM}$	0.65V 0.75V 0.80V 0.85V	$I_{FM} = 5.0A$
Peak reverse current MBRD1020CT-100CT MBRD1020CT-45CT MBRD1050CT-100CT	$I_{RM}$	0.5mA 50mA 25mA	$T_A = 25^\circ C$ $T_A = 100^\circ C$ $T_A = 100^\circ C$
Thermal resistance	$R_{JC}$	2.5°C/W	-----

## 10 Amp Schottky Rectifier 20V-100V



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		

# MBRD1020CT-MBRD10100CT

FIG.1-FORWARD CURRENT DERATING CURVE

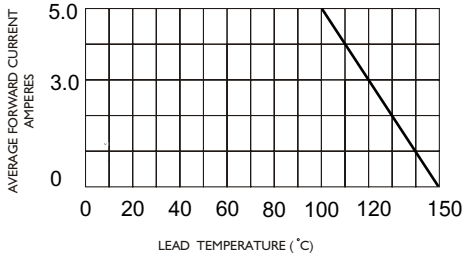


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

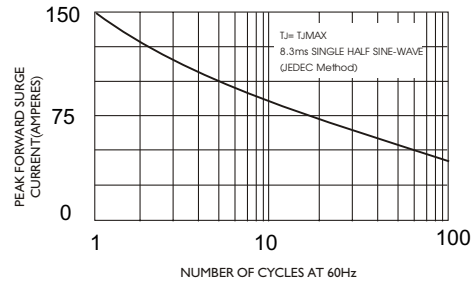


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

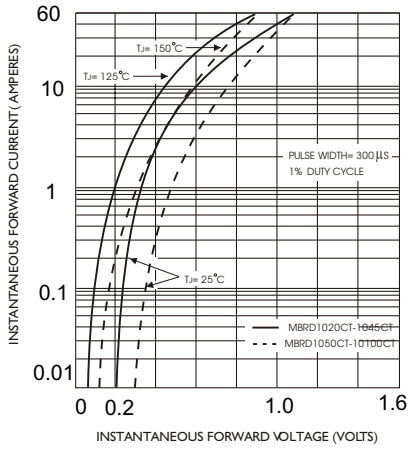


FIG.4-TYPICAL REVERSE CHARACTERISTICS

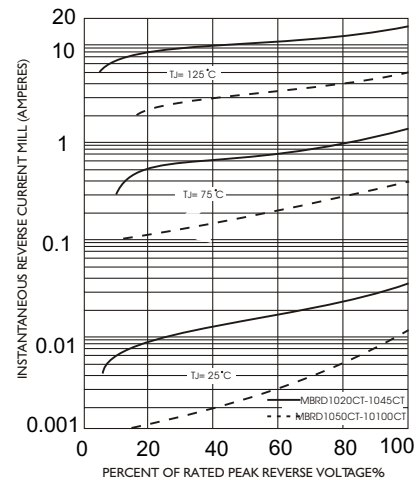


FIG.5-TYPICAL JUNCTION CAPACITANCE

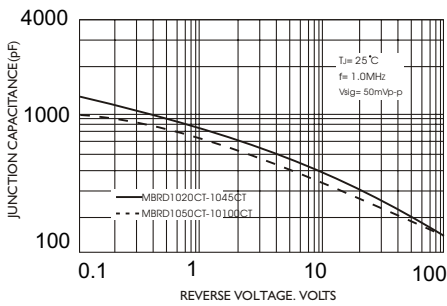
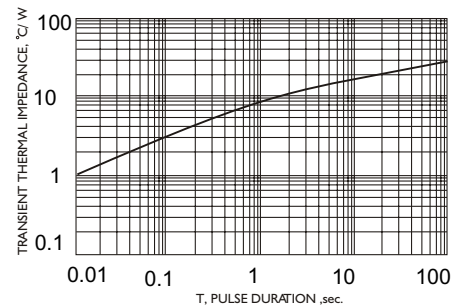


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE







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### Ordering Information :

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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