



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.

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Dual Common Cathode Schottky Rectifier

FEATURES

- Low power loss, high efficiency
- Guardring for overvoltage protection
- High surge current capability
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition



I²PAK



MECHANICAL DATA

Case: I²PAK

Molding compound, UL flammability classification rating 94V-0

Base P/N with suffix "G" on packing code - halogen-free

Terminal: Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 1A whisker test

Polarity: As marked

Weight: 1.7 g (approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)			
PARAMETER	SYMBOL	MBRI20100CT	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	100	V
Maximum RMS voltage	V _{RMS}	70	V
Maximum DC blocking voltage	V _{DC}	100	V
Maximum average forward rectified current	I _{F(AV)}	20	A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	150	A
Maximum instantaneous forward voltage (Note 2) I _F = 10 A, T _J =25°C I _F = 10 A, T _J =125°C I _F = 20 A, T _J =25°C I _F = 20 A, T _J =125°C	V _F	0.85 0.75 0.95 0.85	V
Maximum reverse current @ rated VR T _J =25 °C T _J =125 °C	I _R	0.1	mA
		5	
Voltage rate of change (Rated V _R)	dV/dt	10000	V/μs
Typical thermal resistance	R _{θJC}	2	°C/W
Operating junction temperature range	T _J	- 55 to +150	°C
Storage temperature range	T _{STG}	- 55 to +150	°C

Note 1: Pulse test with PW=300μs, 1% duty cycle

ORDERING INFORMATION				
PART NO.	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING
MBRI20100CT	C0	Suffix "G"	I ² PAK	50 / Tube

EXAMPLE				
PREFERRED P/N	PART NO.	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
MBRI20100CT C0	MBRI20100CT	C0		
MBRI20100CT C0G	MBRI20100CT	C0	G	Green compound

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

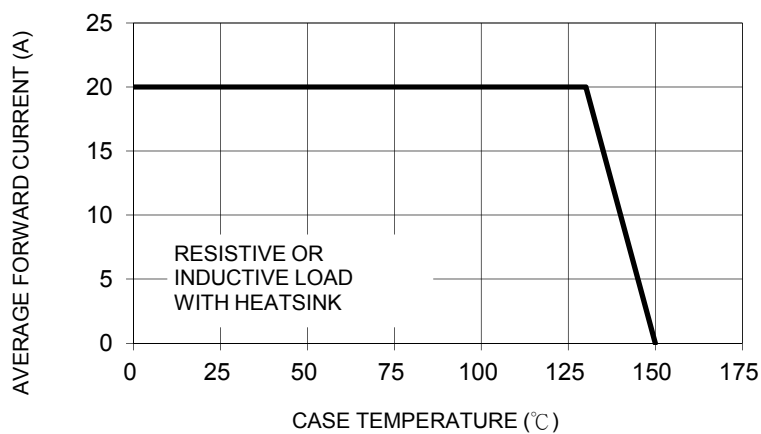


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

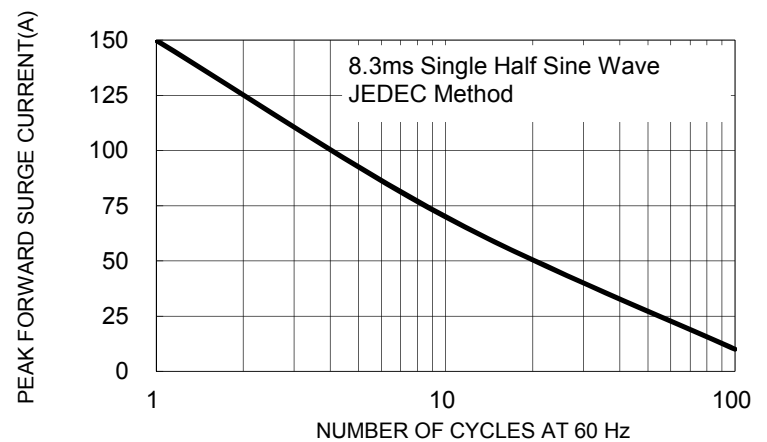


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

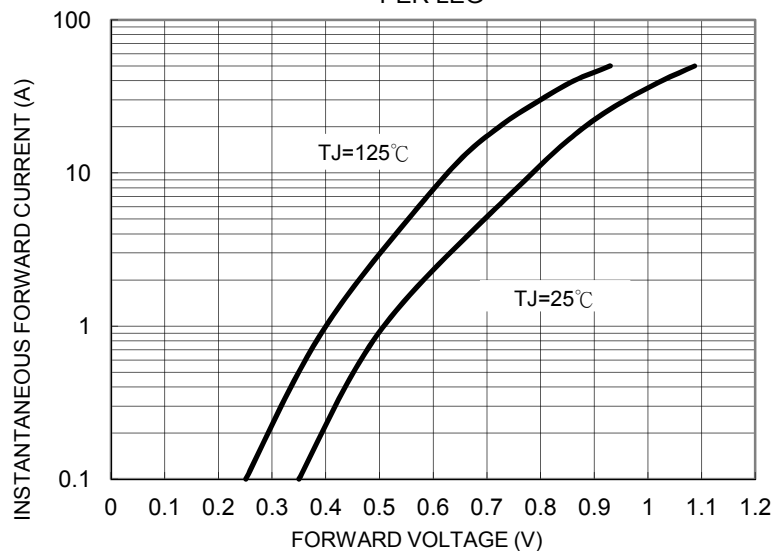


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

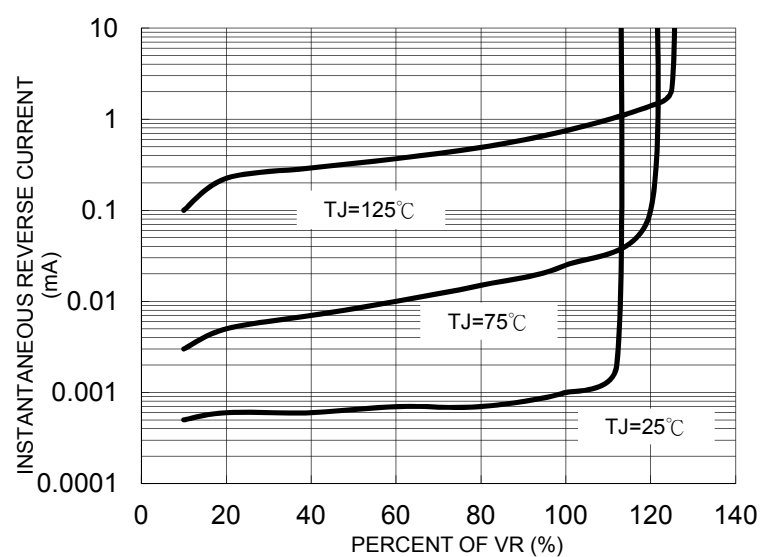


FIG. 5 TYPICAL JUNCTION CAPACITANCE

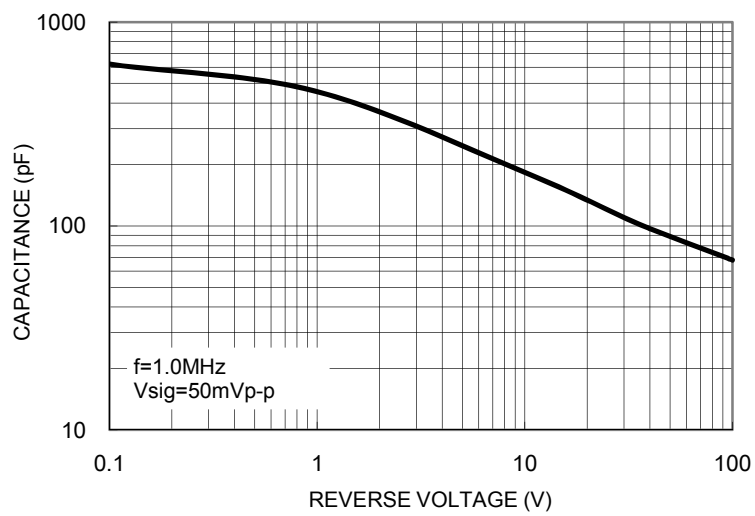
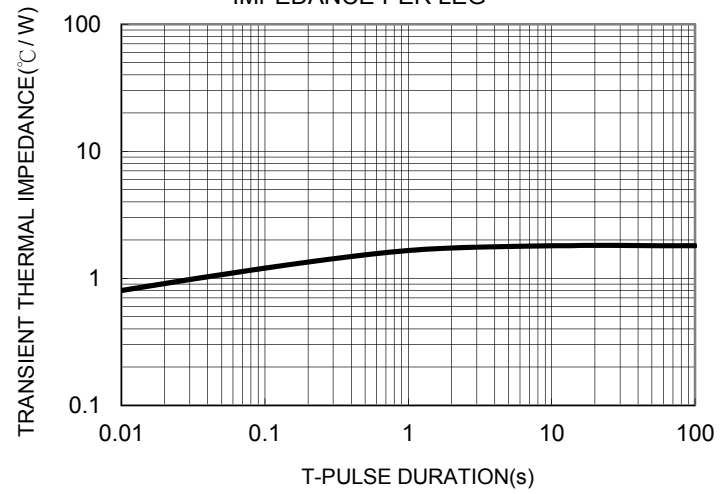
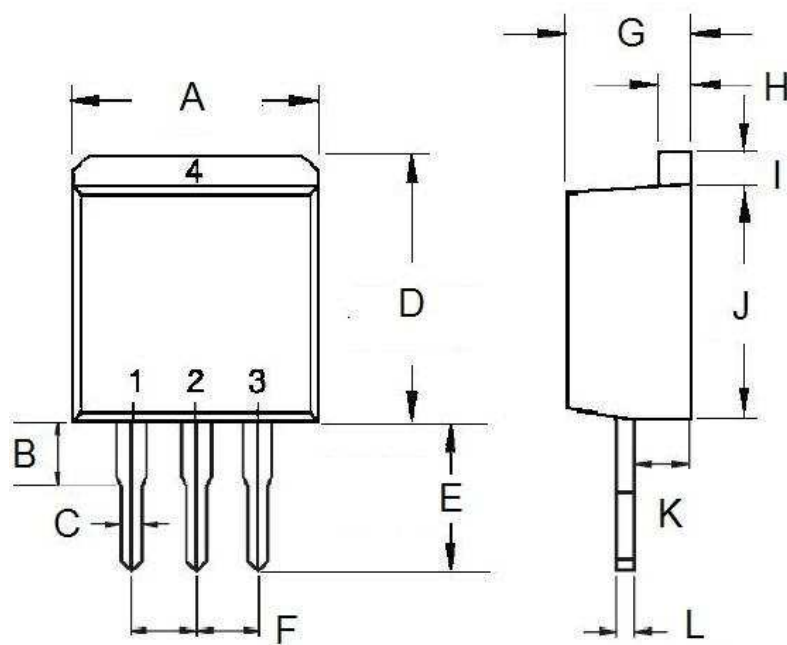


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG



PACKAGE OUTLINE DIMENSIONS



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	-	10.50	-	0.413
B	3.56	4.06	0.140	0.160
C	0.68	0.94	0.027	0.037
D	14.60	15.88	0.575	0.625
E	7.58	8.12	0.298	0.320
F	2.41	2.67	0.095	0.105
G	4.44	4.70	0.175	0.185
H	1.14	1.40	0.045	0.055
I	1.14	1.40	0.045	0.055
J	8.25	9.25	0.325	0.364
K	2.54	2.79	0.100	0.110
L	0.35	0.64	0.014	0.025

MARKING DIAGRAM



P/N = Marking Code
G = Green Compound
YWW = Date Code
F = Factory Code

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