



Dual Common Cathode Schottky Rectifier

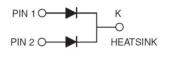
FEATURES

- Low power loss, high efficiency
- Ideal for automated placement
- Guardring for overvoltage protection
- High surge current capability
- Moisture sensitivity level: level 1, per J-STD-020
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition





TO-263AB (D²PAK)





MECHANICAL DATA

Case: TO-263AB (D²PAK)

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: 1.4 g (approximately)

PARAMETER	SYMBOL	MBRS25H45CT	Unit	
Maximum repetitive peak reverse voltage	V_{RRM}	45	V	
Maximum RMS voltage	V _{RMS}	31	V	
Maximum DC blocking voltage	V _{DC}	45	V	
Maximum average forward rectified current	I _{F(AV)}	25	A	
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	150	А	
Maximum instantaneous forward voltage (Note 1) I_F =12.5A, T_J =25 $^{\circ}$ C		0.70		
I _F =12.5A, T _J =125℃	V _F	0.60	V	
I _F =25A, T _J =25℃		0.90		
I _F =25A, T _J =125℃		0.75		
Maximum reverse current @ rated VR T _J =25 ℃		0.2	^	
T _J =125 ℃	I _R	15	mA	
Voltage rate of change (Rated V _R)	dV/dt	10000	V/µs	
Trunical theoretical vaciation of	$R_{ heta JC}$	1.5	00,144	
Typical thermal resistance	$R_{\theta JA}$	50	°C/W	
Operating junction temperature range	T _J	- 55 to +175	°С	
Storage temperature range	T _{STG}	- 55 to +175	οС	

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

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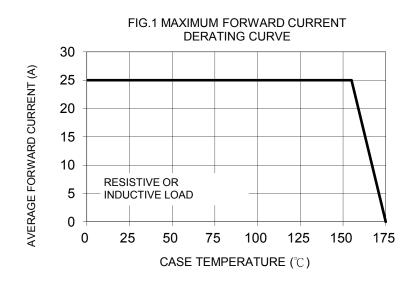


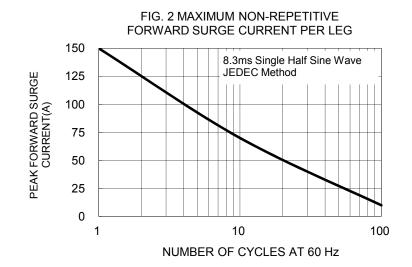
ORDERING INFORMATION				
PART NO.	PACKING CODE	GREEN COMPOUND	PACKAGE	PACKING
		CODE		
MBRS25H45CT	RN	Suffix "G"	D ² PAK	800 / 13" Paper reel
MBR323H45C1	C0	Sullix G	D ² PAK	50 / Tube

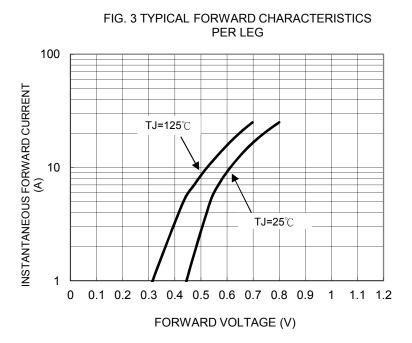
EXAMPLE				
PREFERRED P/N PART NO. PACKING CODE		GREEN COMPOUND CODE	DESCRIPTION	
MBRS25H45CT RN	MBRS25H45CT	RN		
MBRS25H45CT RNG	MBRS25H45CT	RN	G	Green compound

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)







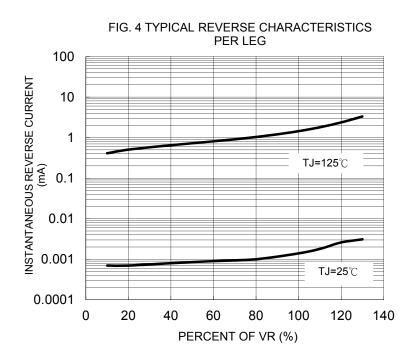
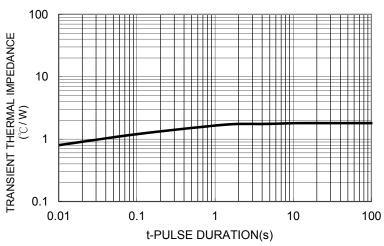
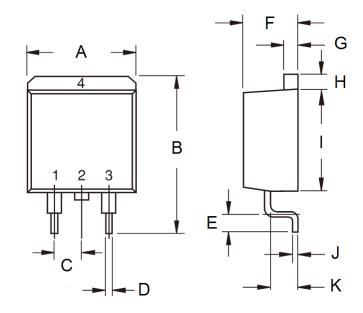




FIG. 5 TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG

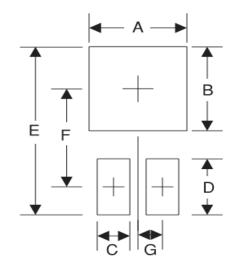


PACKAGE OUTLINE DIMENSIONS



DIM.	Unit (mm)		Unit (inch)	
DIIVI.	Min	Max	Min	Max
Α	•	10.5	-	0.413
В	14.60	15.88	0.575	0.625
С	2.41	2.67	0.095	0.105
D	0.68	0.94	0.027	0.037
Е	2.29	2.79	0.090	0.110
F	4.44	4.70	0.175	0.185
G	1.14	1.40	0.045	0.055
Н	1.14	1.40	0.045	0.055
I	8.25	9.25	0.325	0.364
J	0.36	0.53	0.014	0.021
K	2.03	2.79	0.080	0.110

SUGGESTED PAD LAYOUT



Symbol	Unit (mm)	Unit (inch)
Α	10.8	0.425
В	8.3	0.327
С	1.1	0.043
D	3.5	0.138
E	16.9	0.665
F	9.5	0.374
G	2.5	0.098

MARKING DIAGRAM



P/N = Specific Device Code G = Green Compound

YWW = Date Code F = Factory Code

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