

Schottky Diodes

Features

- High frequency operation
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability
- \bullet Meets MSL level 1, per J-STD-020, LF maximum peak of 260 $^\circ\!\!\mathbb{C}$

Typical Applications

Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.

Mechanical Data

• Package: TO-263 Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant

- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: As marked

■Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MBRB3060CT
Device marking code			MBRB3060CT
Repetitive Peak Reverse Voltage	VRRM	V	60
Average Rectified Output Current @60Hz sine wave, R-load, Ta=25°C	IO	А	30
Surge(Non-repetitive)Forward Current @60H _Z half sine-wave, 1 cycle, T _a =25°C	IFSM	А	250
Current Squared Time @1ms≤t≤8.3ms Tj=25°C,	l²t	A²s	262
Storage Temperature	Tstg	°C	-55 ~ +150
Junction Temperature	Tj	°C	-55 ~ +150

Electrical Characteristics ($T_a=25$ °C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MBRB3060CT
Maximum instantaneous forward voltage drop per diode	VFM	V	IFM=15.0A	0.72
Maximum DC reverse current at rated DC blocking voltage per diode		VRM=VRRM T _a =25°C	0.2	
	IRRM2	mA	VRM=VRRM T _a =125°C	50

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MBRB3060CT

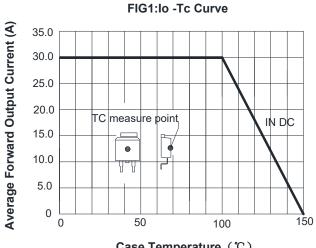
■Thermal Characteristics (Ta=25°C Unless otherwise specified)

PARA	METER	SYMBOL	UNIT	MBRB3060CT
Thermal Resistance	Between junction and case	RθJ-C	°CW	2.0

■Ordering Information (Example)

PREFERED P/N	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MBRB3060CT	Approximate 1.43	50	2000	8000	Tube
MBRB3060CT	Approximate 1.43	1000	2000	10000	Reel

■Characteristics (Typical)



Case Temperature (℃)

FIG2:Surge Forward Current Capability

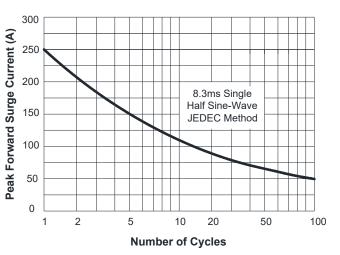


FIG3: Forward Voltage

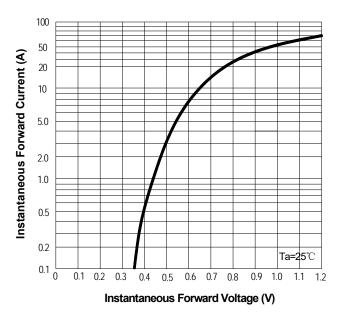
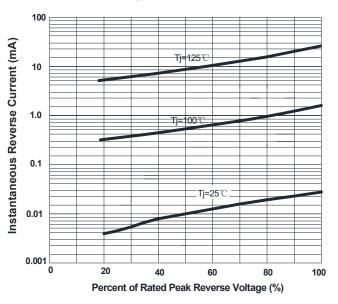


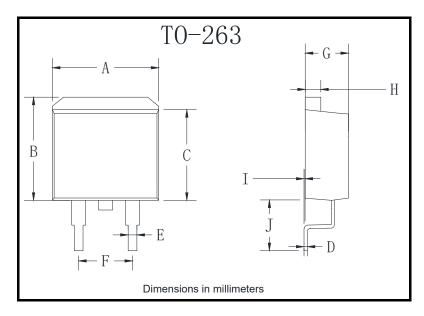
FIG.4: Typical Reverse Characteristics



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Outline Dimensions



TO-263					
Dim	Min	Max			
А	9.5	11.5			
В	9.7	10.5			
С	8.4	9.0			
D	0.28	0.64			
E	0.68	0.94			
F	4.55	5.6			
G	4.04	5.10			
Н	1.14	1.4			
I	0	0.2			
J	4.9	6.05			

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MBRB3060CT

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