



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
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260

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 (T_a=25 Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MBRB2045CTS
Device marking code			MBRB2045CTS
Repetitive Peak Reverse Voltage	VRRM	V	45
Average Rectified Output Current @60Hz sine wave, R-load, T _C =124	I _O	A	20
Surge(Non-repetitive)Forward Current @60Hz half sine-wave,1 cycle, T _a =25	I _{FSM}	A	130
Current Squared Time @1ms t 8.3ms T _j =25	I ² t	A ² s	70
Storage Temperature	T _{stg}		-55 ~ +150
Junction Temperature	T _j		-55 ~ +150

Electrical Characteristics T_a=25 Unless otherwise specified

PARAMETER	SYMBOL	UNIT	MBRB2045CTS
Forward Voltage	V _F	V	0.45 (max)
Reverse Leakage Current	I _R	μA	10 (max)
Dynamic Forward Resistance	r _{DF}	Ω	0.05 (max)
Dynamic Reverse Resistance	r _{DR}	Ω	0.05 (max)
Reverse Recovery Time	t _{RR}	ns	10 (max)
Reverse Recovery Current	I _{RR}	mA	10 (max)
Capacitance	C _J	pF	10 (max)

MBRB2045CTS



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