MBRF10200CT

Product profile

Dual Common-Cathode Ultra Low VF Schottky Rectifier

General description

Rectifiers 10 Amp 200V

Features

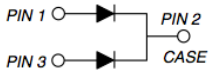
- Guard ring for overvoltage protection
- Lower power losses, high efficiency
- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High frequency operation
- Solder Dip 260 °C, 40 s
- Component in accordance to ROHS 2002/95/EC

and WEEE 2002/96/EC

Typical applications

For use in high frequency rectifier of switching mode power supplies, freewheeling diodes, dc-to-dc converters or polarity protection application.

ITO-220AB



Mechanical data

Case: ITO-220AB

Molding compound meets UL 94 V-0 flammability rating

Terminals: Matte tin plated leads, solderable per meets JESD 201

Polarity: As marked

Weight: 2.3 grams

Mounting Torque: 10 in-lbs maximum

Maximum Ratings (Tc=25°C unless otherwise noted)

Parameter	Symbol	MBRF10200CT	Unit
Maximum repetitive peak reverse voltage	VRRM	200	V
RMS Voltage (Max.)	VRMS	140	V
Working peak reverse voltage	VRWM	200	V
Maximum average forward rectified current Total Device	IF(AV)	10	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	120	A
Operating junction temperature range	TJ	-55 to +150	°C
Storage temperature range	TSTG	-55 to +150	°C

THERMAL CHARACTERISTICS

Parameter	Symbol	Value	Unit
Typical thermal resistance	RθJC	4.5	°C/W

Notes: (1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

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Electrical characteristics (Tc=25°C unless otherwise noted)

OFF CHARACTERISTICS

Parameter	Symbol	Value		Unit
		Typical	Max	
Instantaneous forward voltage at IF=5A, Tj=25°C at IF=5A, Tj=125°C	VF	 0.88 0.75	 0.90 0.80	V
Maximum reverse current Tj=25°C	IR	100		u'A
at working peak reverse voltage Tj=125°C		1		m'A

DEVICE MARK

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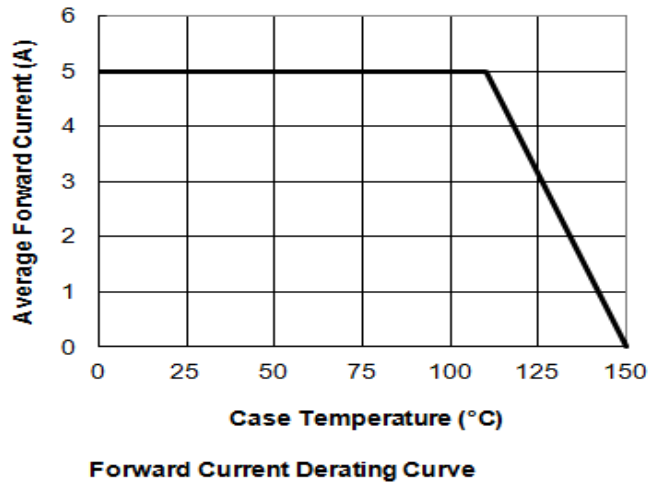
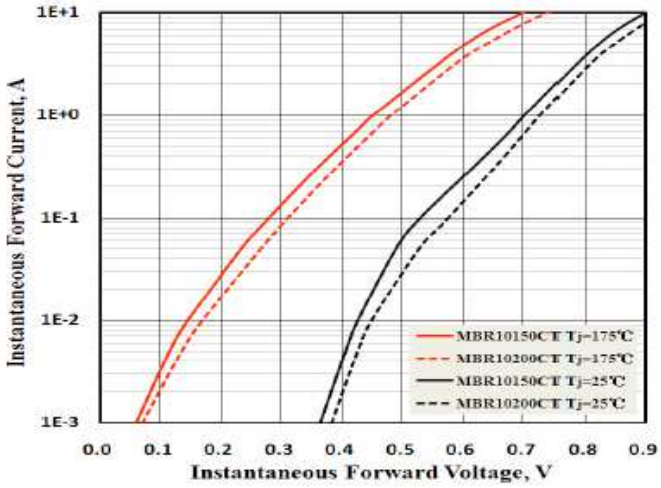
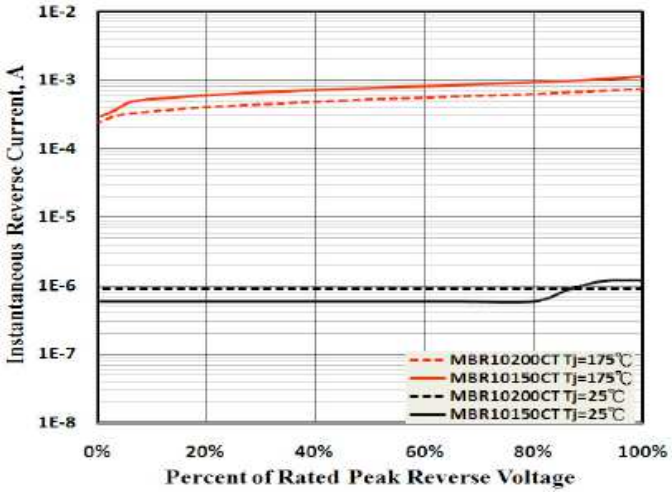
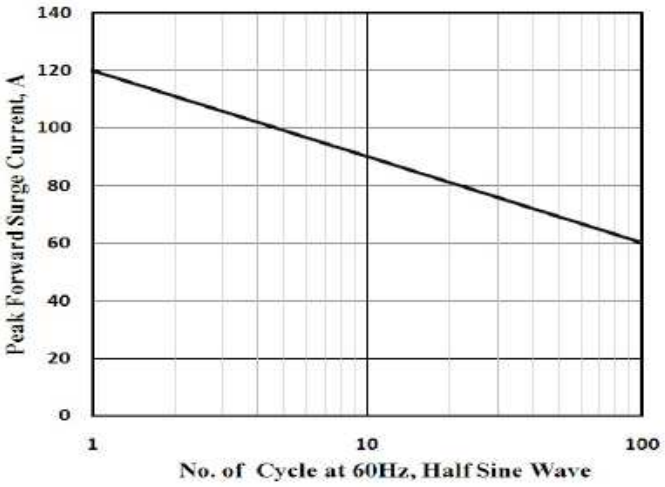
■ Characteristic Curves

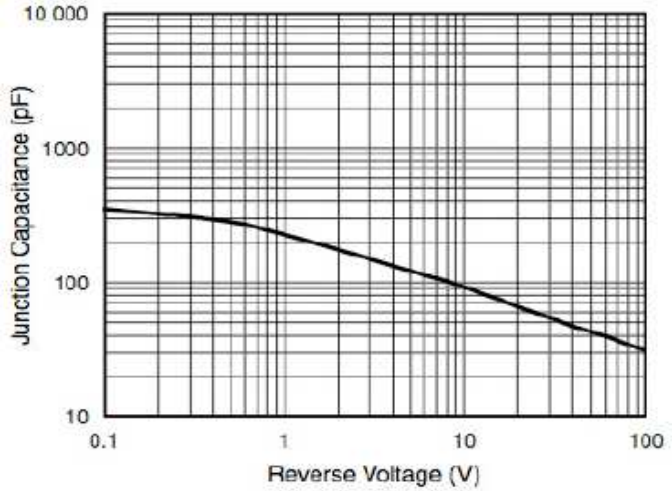


Forward Current Derating Curve









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