

TMBR10100CT

Ultra Low VF Schottky Rectifier

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
- RoHS compliant package

Applications

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

Mechanical Data

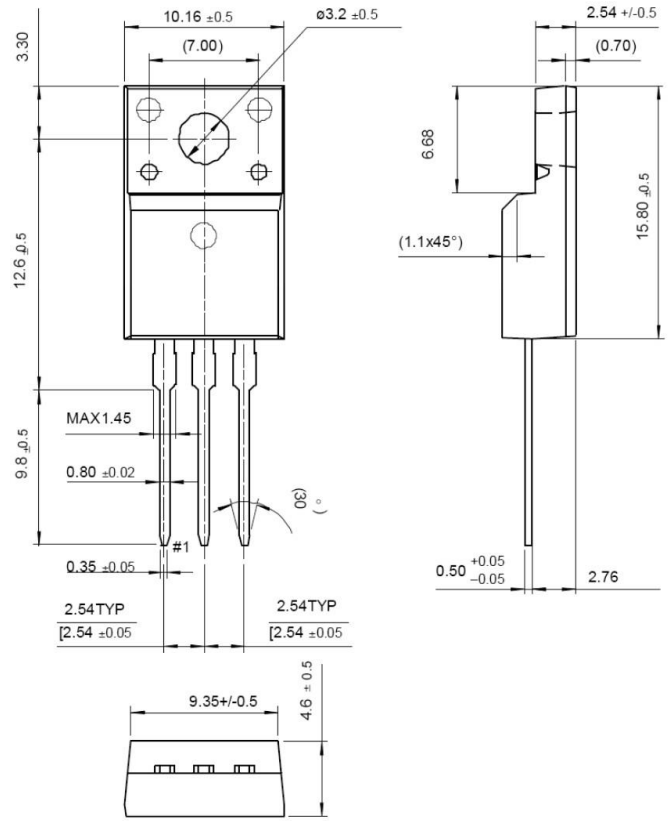
- Case: TO-220AB
- Molding compound meets UL 94 V-0 flammability
- Terminals: Matte tin plated leads
- Polarity: As marked
- Weight: 2.24 grams
- Mounting Torque: 10 in-lbs maximum

Packing & Order Information

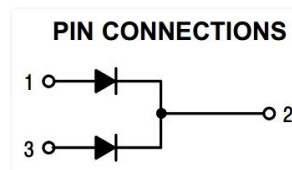
50/Tube ; 1,000/Box



**RoHS
COMPLIANT**



Graphic symbol



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MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameter	Symbol	TMBR10100CT	Unit
Maximum repetitive peak reverse voltage	VRRM	100	V
Working peak reverse voltage	VRWM	100	V
Maximum DC blocking voltage	VDC	100	V
Maximum average forward rectified current Total device	IF(AV)	5	A
Average Rectified Forward Current	Io(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

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

Parameter	Symbol	Value		Unit
		Typical	Max	
Instantaneous forward voltage at IF=5A, Tj=25°C at IF=5A, Tj=125°C	VF	0.62 0.56	0.65 0.60	V
Maximum reverse current per leg Tj=25°C	IR	200		u'A
at working peak reverse voltage Tj=125°C		1		m'A

Notes:

- (1) Pulse test: 300 μ s pulse width, 1 % duty cycle
- (2) Pulse test: Pulse width \leq 40 ms

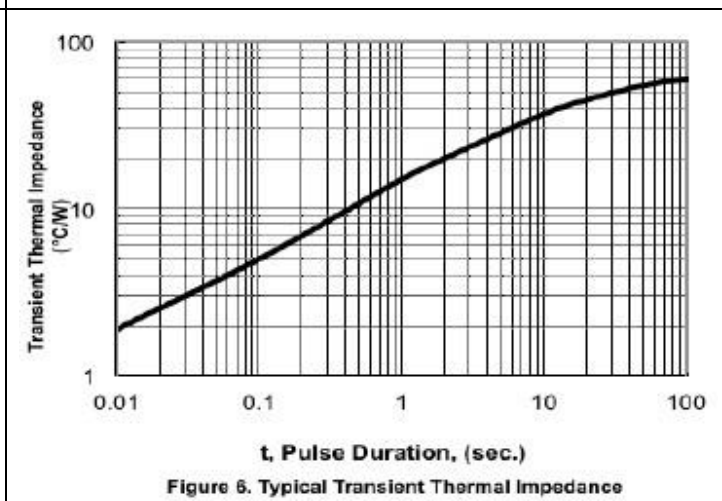
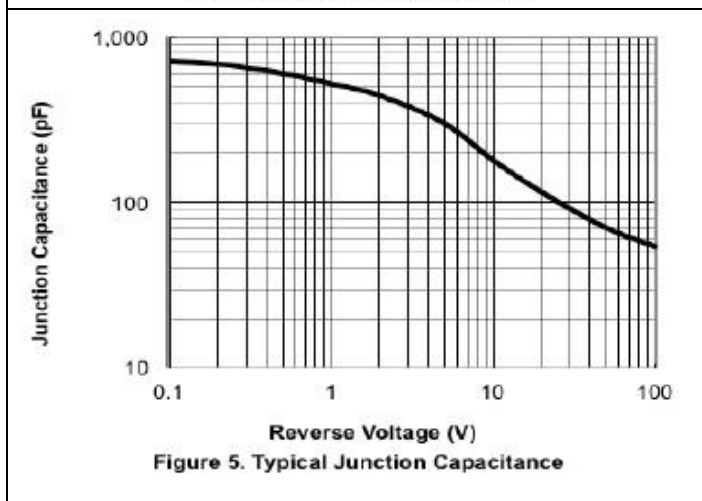
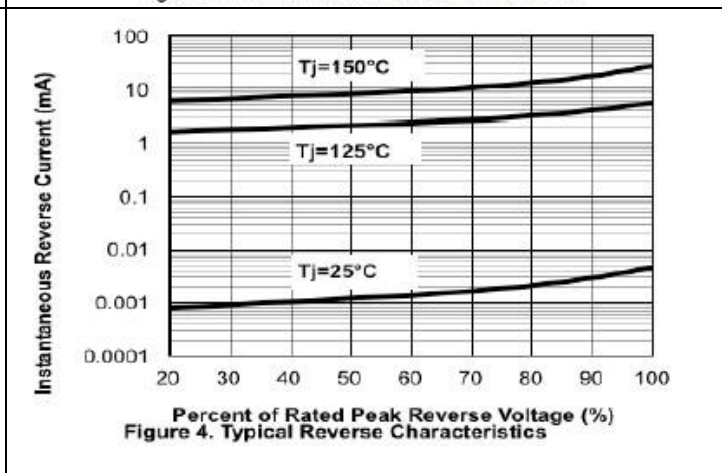
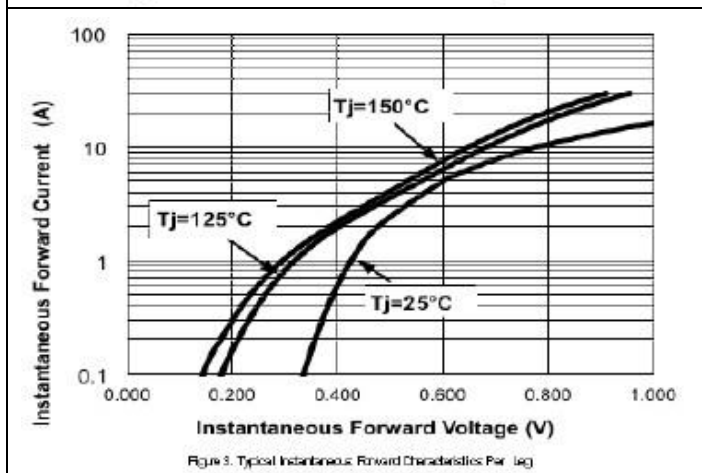
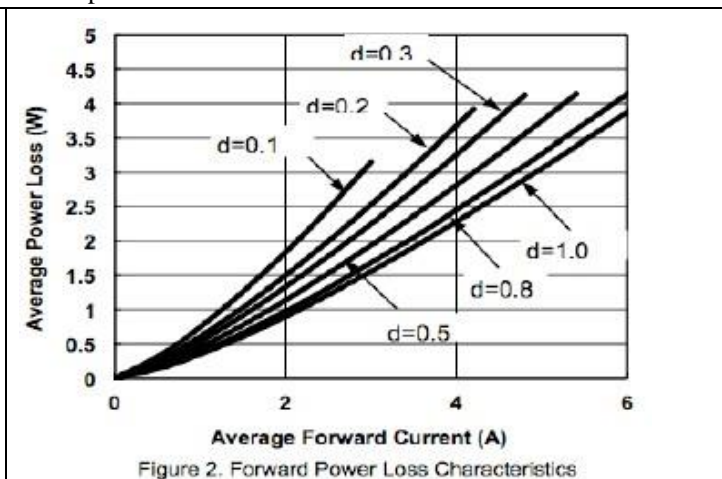
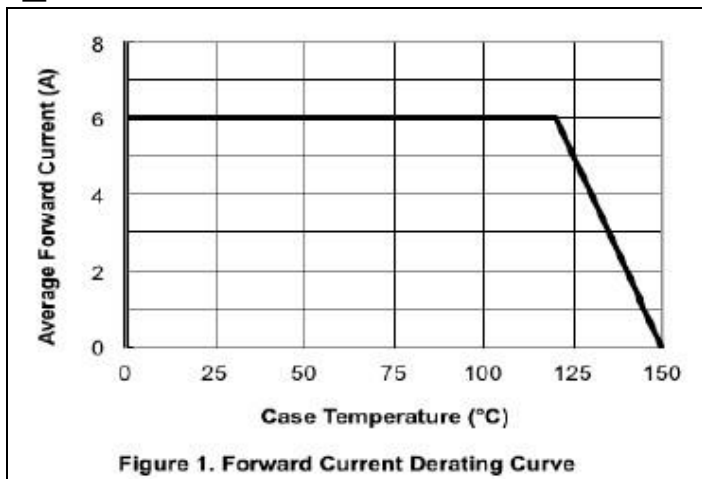
Thermal characteristics (Tc=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Typical thermal resistance	Rthjc	4	°C/W
	R θ JA	60	

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■ TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



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