

Dual Common-Cathode
Ultra Low VF Schottky Rectifier
TMBR2080CT

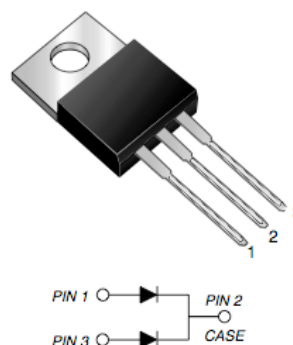
FEATURES

- 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.

TO-220AB



MECHANICAL DATA

Case: TO-220AB

Molding compound meets UL 94 V-0 flammability rating

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

Polarity: As marked

Weight: 2.35 grams

Mounting Torque: 10 in-lbs maximum

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum Ratings ($T_c=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	TMBR2080CT	Unit
Maximum repetitive peak reverse voltage	VRRM	80	V
Working peak reverse voltage	VRWM	80	V
Maximum DC blocking voltage	VDC	80	V
Maximum average forward rectified current	IF(AV)	10	A
Average Rectified Forward Current	Io (AV)	20	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	
Maximum instantaneous forward voltage per leg	VF	at IF=10A, Tj=25°C	0.61	0.65	V
		at IF=10A, Tj=125°C	0.58	0.62	
Maximum reverse current per leg at working peak reverse voltage	IR	Tj=25°C	200		u'A
		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	R θ JA	60	°C/W
	Rthjc	4	

ORDERING INFORMATION

PACKAGE	BASE QUANTITY	DELIVERY MODE
TO-220AB	50/Tube	Tube

TYPICAL CHARACTERISTICS @ Ta=25 °C unless otherwise specified

