

Schottky Dual Diode

MBRB2545CT

45V / 30A

DATASHEET

from

www.web-bcs.com

OEM – General Semiconductor

Source: General Semiconductor Databook 1998

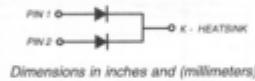
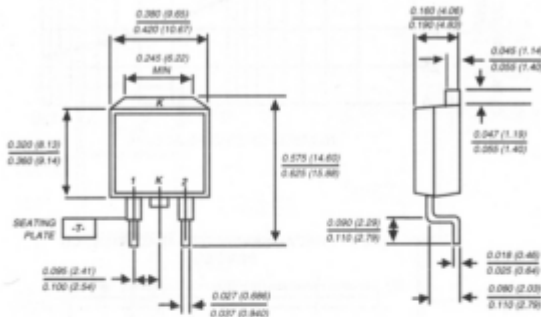
NEW PRODUCT NEW PRODUCT NEW PRODUCT

MBRB2535CT THRU MBRB2560CT

SCHOTTKY RECTIFIER

Reverse Voltage - 35 to 60 Volts Forward Current - 30.0 Amperes

TO-263AB



Dimensions in inches and (millimeters)

FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- ◆ Dual rectifier construction, positive center-tap
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ High current capability, low forward voltage drop
- ◆ High surge capability
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- ◆ Guardring for overvoltage protection
- ◆ High temperature soldering in accordance with CECC 802 / Reflow guaranteed



MECHANICAL DATA

Case: JEDEC TO-263AB molded plastic body
Terminals: Lead solderable per MIL-STD-750, Method 2026
Polarity: As marked
Mounting Position: Any
Weight: 0.08 ounce, 2.24 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	MBRB2535CT	MBRB2545CT	MBRB2550CT	MBRB2560CT	UNITS
Maximum repetitive peak reverse voltage	VRRM	35	45	50	60	Volts
Maximum working peak reverse voltage	VRWM	35	45	50	60	Volts
Maximum DC blocking voltage	VDC	35	45	50	60	Volts
Maximum average forward rectified current at Tc=130°C	IAV	30.0				Amps
Peak repetitive forward current per leg at Tc=130°C (rated VR, square wave, 20 KHz)	IFRM	30.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	150.0				Amps
Peak repetitive reverse surge current (NOTE 1)	IRRM	1.0		0.5		Amps
Maximum instantaneous forward voltage IF=15.0A, Tc=25°C per leg at: (NOTE 2)	VF	-		0.75		Volts
IF=15.0A, Tc=25°C		-		0.65		
IF= 30A, Tc=25°C		0.82		-		
IF= 30A, Tc=125°C		0.73		-		
Maximum instantaneous reverse current at rated DC blocking voltage per leg (NOTE 2)	IR	Tc=25°C	0.2		1.0	mA
Tc=125°C		40.0		50.0		
Maximum thermal resistance (NOTE 3)	ReJC	1.5				°C/W
Voltage rate of change (rated VR)	dv/dt	10,000				V/μs
Operating junction temperature range	TJ	-65 to +150				°C
Storage temperature range	TSTG	-65 to +175				°C

NOTES: (1) 2.0μs pulse width, f=1.0 KHz
 (2) Pulse test: 300μs pulse width, 1% duty cycle
 (3) Thermal resistance from junction to case per leg

RATINGS AND CHARACTERISTIC CURVES MBRB2535CT THRU MBRB2560CT

