

25A Dual Schottky Rectifiers

PRODUCT SUMMARY

Voltage ratings available from 35 to 60 Volts

FEATURES

Plastic packages have Underwriters Laboratory Flammability

Classification 94V-0

Dual rectifier construction, positive center tap

Metal-silicon junction, majority carrier conduction

Low power loss, high efficiency

Guard-ring for overvoltage protection

For use in low voltage, high frequency inverters, free wheeling,

and polarity protection applications

MECHANICAL DATA

High temperature soldering guaranteed:

250°C for 10 seconds, 0.25" (6.35mm) from case

Case: JEDEC TO-220AB (MBR...) or ITO-220AB (MBRB...) molded plastic body - for dimensions, see page 3

Terminals: Matte-Sn plated leads, solderable per MIL-STD-750, method 2026

Polarity: As marked Mounting Position: Any

Mounting Torque: 10 in-lbs maximum Weight: 0.08 ounce, 2.24 grams

Pb-free; RoHS-compliant

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

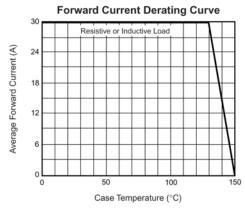
Parameter	Symbol	MBR2535CT MBRB2535CT	MBR2545CT MBRB2545CT	MBR2550CT MBRB2550CT	MBR2560CT MBRB2560CT	Units
Maximum repetitive peak reverse voltage	V _{RRM}	35	45	50	60	Volts
Working peak reverse voltage	V _{RWM}	35	45	50	60	Volts
Maximum DC blocking voltage	V _{DC}	35	45	50	60	Volts
Maximum average forward rectified current at T _c =130°C Total device Per le		25 12.5				Amps
Peak repetitive forward current per leg at (rated V_R , sq. wave 20kHz) at T_c =130°C	I _{FRM}	30				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) per leg	I _{FSM}	150				Amps
Peak repetitive reverse surge current per leg at $t_{\rm p}$ = 2.0us, 1KHz	I _{RRM}	1.0 0.5			Amps	
Voltage rate of change (rated $V_{\rm R}$)	dv/dt	10,000				V/us
Maximum instantaneous forward voltage per leg (Note 1) $at\ I_F = 12.5A,\ T_C = 25^\circ C$ $at\ I_F = 12.5A,\ T_C = 125^\circ C$ $at\ I_F = 25A,\ T_C = 25^\circ\ C$ $at\ I_F = 25A,\ T_C = 125^\circ C$	V _F	- 0.75 - 0.65 0.82 - 0.73			Volt	
	I _R	0.2 40		1.0 50		mA
Thermal resistance from junction to case per leg	R _{eJC}	1.5				°C/W
Operating junction temperature range	T _J	-55 to +150			°C	
Storage temperature range	T _{STG}	-55 to +150			°C	

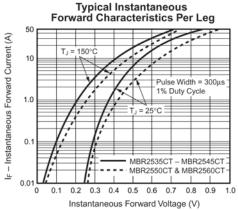
Notes: 1. Pulse test: 300us pulse width, 1% duty cycle

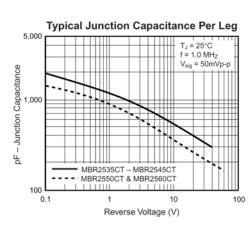


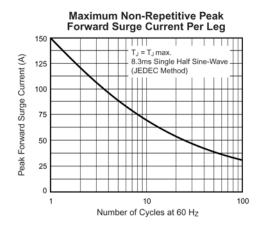
RATINGS AND CHARACTERISTIC CURVES

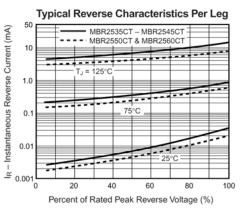
 $(T_A = 25^{\circ}C \text{ unless otherwise noted})$

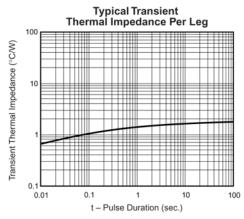






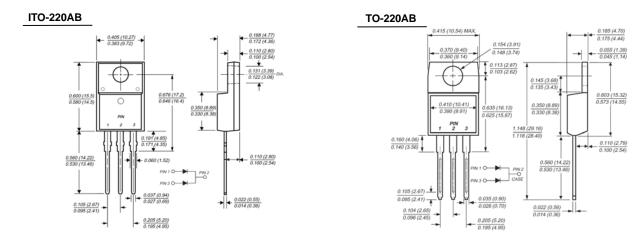








PHYSICAL DIMENSIONS



Dimensions in inches and (millimeters)

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