



HFZT

MBR2530CT--- MBR25100CT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE: 30--- 100 V CURRENT: 25.0 A

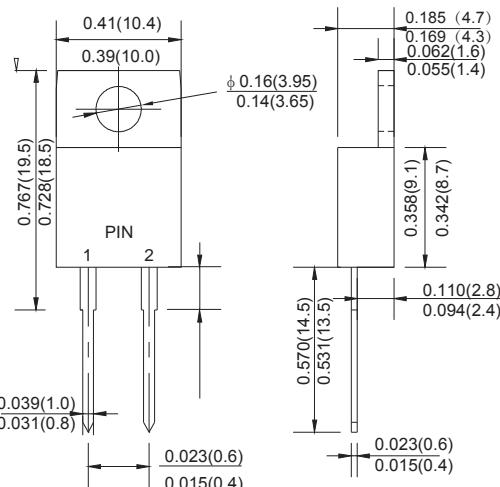
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- 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
- Dual rectifier construction
- High temperature soldering guaranteed:260 °C/10 seconds
- Component in accordance to RoHS 2002/95/Ec and WEEE 2002/96/EC

MECHANICAL DATA

- Case: TO-220AB molded plastic body
- Terminals:Lead solderable per MIL-STD-750,method 2026
- Polarity:Color band denotes cathode end

TO-220AB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted) Single phase,half wave,60 Hz,resistive or inductive load.

For capacitive load,derate by 20%.

TYPE NUMBER	SYMBOL	MBR 2530CT	MBR 2535CT	MBR 2540CT	MBR 2545CT	MBR 2550CT	MBR 2560CT	MBR 2580CT	MBR 25100CT	UNI TS			
Maximum recurrent peak reverse voltage	V_{RRM}	30	35	40	45	50	60	80	100	V			
Maximum RMS voltage	V_{RMS}	21	25	28	32	35	42	56	70	V			
Maximum DC blocking voltage	V_{DC}	30	35	40	45	50	60	80	100	V			
Maximum Average Forward rectified Current @TC = 130°C	$I_{F(AV)}$	25.0								A			
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	200.0								A			
Maximum forward Voltage (Note 1) (IF=15A,TC=25°C) (IF=25A,TC=125°C)	V_F	--			0.75			0.85		V			
		0.82			--			--					
Maximum reverse current at rated DC blocking voltage @ $T_A=25^\circ C$ @ $T_A=100^\circ C$	I_R	0.2			1.0			50.0		mA			
		40.0											
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	1.5								°C/W			
Storage Temperature	T_{STG}	- 55 ---- + 150								°C			
Operation Junction Temperature	T_j	- 55 ---- + 150								°C			

NOTE: 1. Pulse test:300μs pulse width,1% duty cycle.

2. Thermal resistance from junction to case.



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RATINGS AND CHARACTERISTIC CURVES

FIG.1 – PEAK FORWARD SURGE CURRENT

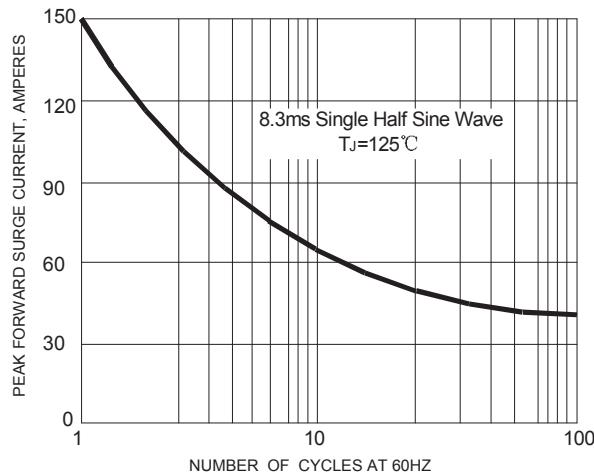


FIG.2 – TYPICAL REVERSE CHARACTERISTIC

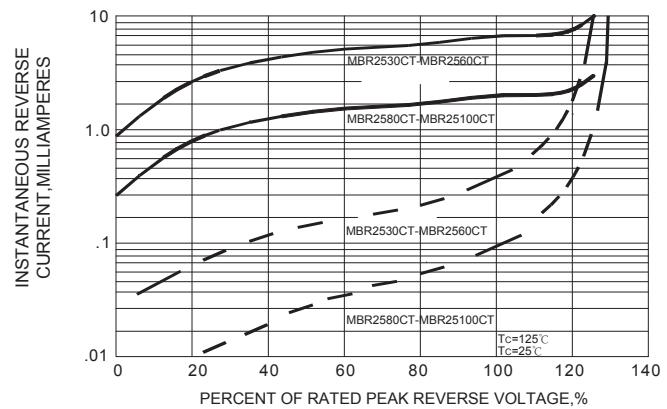


FIG.3 -- TYPICAL FORWARD CHARACTER

