MBR2530CT--- MBR25100CT

SCHOTTKY BARRIER RECTIFIER

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

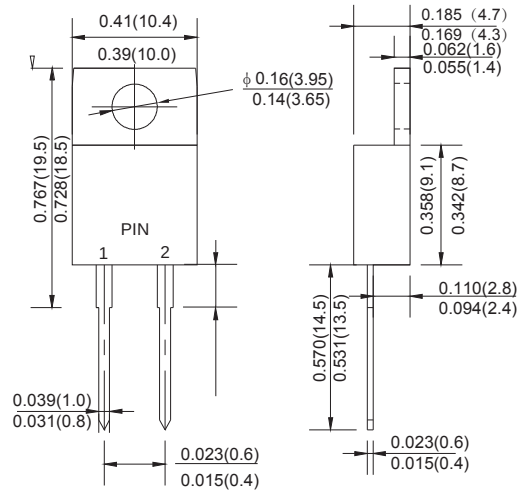
FEATURES

- ●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 ℃/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	UNITS
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 forw ard surge current 8.3ms single half sine-w ave superimposed on rated load		I_{FSM}	200.0								A
Maximum forward Voltage (Note 1)	(IF=15A,TC=25℃)	V_F	--				0.75		0.85		V
	(IF=25A,TC=125℃)		0.82				--		--		
Maximum reverse current at rated DC blocking voltage	@T_A=25℃	I_R	0.2				1.0				mA
	@T_A=100℃		40.0				50.0				
Typical Thermal Resistance (Note 2)		$R_{\theta JA}$	1.5								℃/W
Storage Temperature		T_{STG}	- 55 ---- + 150								℃
Operation Junction Temperature		T_j	- 55 ---- + 150								℃

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

2. Thermal resistance from junction to case.

RATINGS AND CHARACTERISTIC CURVES

FIG.1 – PEAK FORWARD SURGE CURRENT

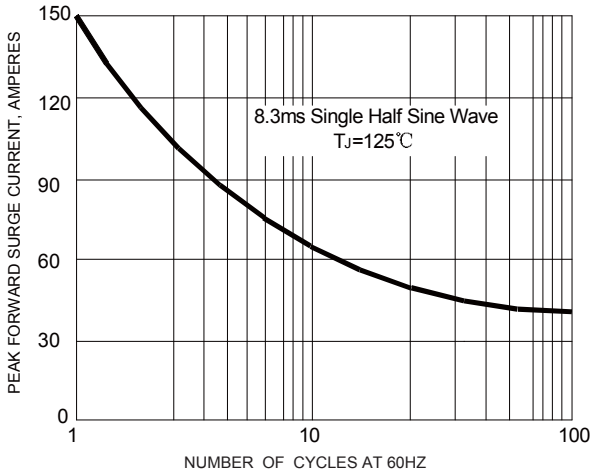


FIG.2 -- TYPICAL REVERSE CHARACTERISTIC

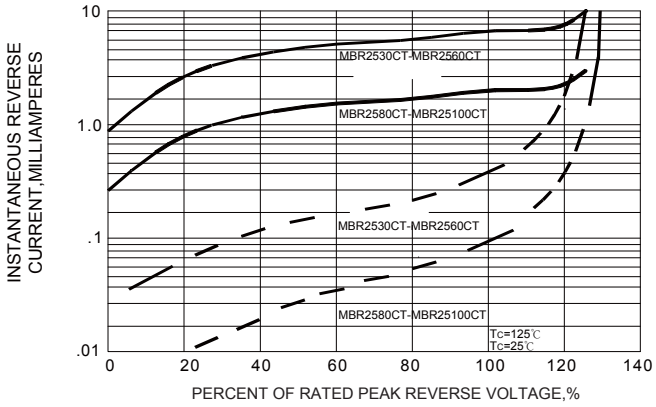


FIG.3 -- TYPICAL FORWARD CHARACTER