MBR1530---MBR15100CT

HIGH VOLAGE RECTIFIERS

VOLTAGE RANGE: 30--- 100 V CURRENT: 15.0 A

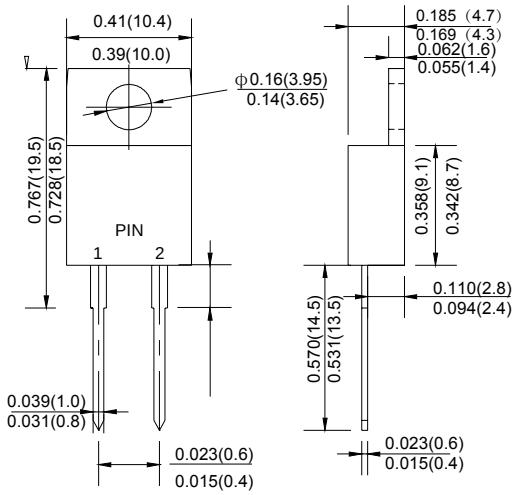
FEATURES

- ●High surge capacity
- ●For use in low voltage, high frequency inverters,free wheeling, and polarity protection applications
- ●Metal silicon junction, majority carrier conduction High current capacity,low forward voltage drop,Guard ring for over voltage protection
- ●High temperature soldering guaranteed:260 ℃/10 seconds at t erminals 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: As marked

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 1530CT	MBR 1535CT	MBR 1540CT	MBR 1545CT	MBR 1550CT	MBR 1560CT	MBR 1580CT	MBR 15100CT	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 @T_C = 105°C		$I_{F(AV)}$	15.0								A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	80.0								A
Maximum forward Voltage (Note 1)	(IF=7.5A,TC=25℃)	V_F	--			0.75			0.80		V
	(IF=7.5A,TC=125℃)		0.57			0.65			--		
	(IF=15A,TC=25℃)		0.84			--			--		
	(IF=15A,TC=125℃)		0.72			--			--		
Maximum reverse current at rated DC blocking voltage	@T_A=25℃	I_R	0.1			1.0			0.1		mA
	@T_A=100℃		15.0			50			6.0		
Typical Thermal Resistance (Note 2)		$R_{\theta JA}$	3.0								℃/W
Storage Temperature		T_{STG}	- 55 ---- + 150								℃
Operation Junction Temperature		T_j	- 55 ---- + 125								℃

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

2. Thermal resistance from junction to case.

RATINGS AND CHARACTERISTIC CURVES

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FIG.1 -- PEAK PULSE POWER RATING CURVE

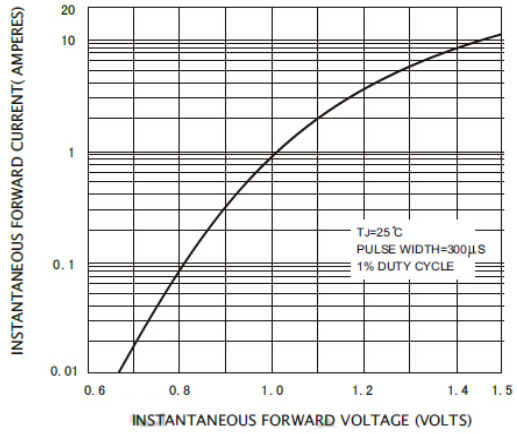

FIG.2 -- PULSE DERATING CURVE

FIG.3 -- PEAK FORWARD SURGE CURRENT

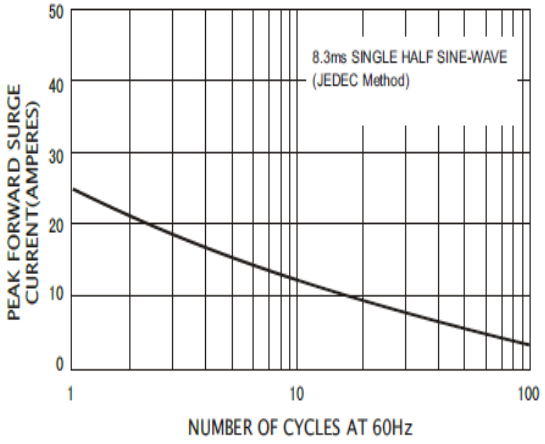

FIG.4-TYPICAL REVERSE CHARACTERISTICS

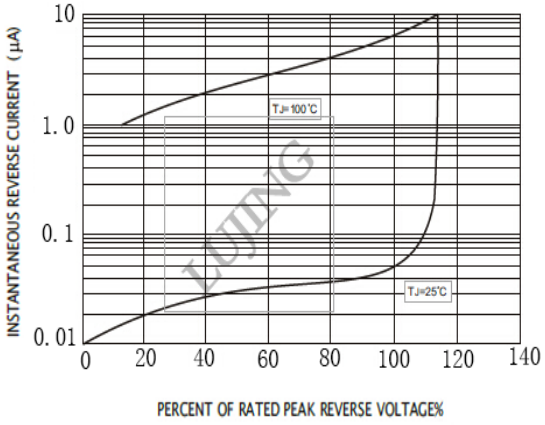

FIG.4 - TYPICAL JUNCTION CAPACITANCE