

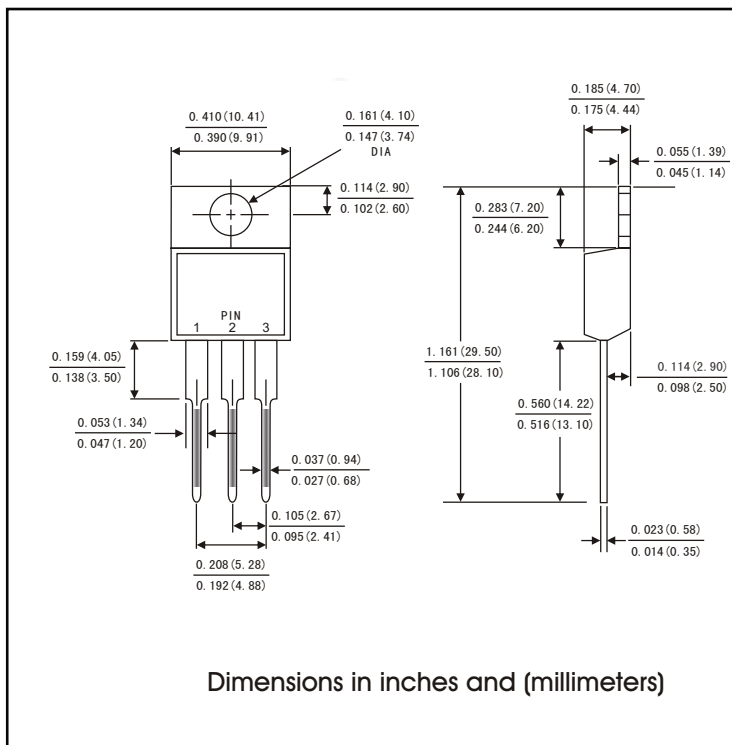
SCHOTTKY BARRIER RECTIFIER

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- 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
- High temperature soldering guaranteed:260 °C/10 seconds at terminals
- 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



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 2020CT	MBR 2030CT	MBR 2040CT	MBR 2050CT	MBR 2060CT	MBR 2080CT	MBR 20100CT	MBR 20200CT	UNITS
Maximum recurrent peak reverse voltage		V _{RRM}	20	30	40	50	60	80	100	200	V
Maximum RMS voltage		V _{RMS}	14	21	31	35	42	56	70	140	V
Maximum DC blocking voltage		V _{DC}	20	30	40	50	60	80	100	200	V
Maximum Average Forward rectified Current0.375"(9.5mm) lead length		I _{F(AV)}	20								A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load		I _{FSM}	150								A
Maximum instantaneous forwardvoltage at 10.A(Note1)		V _F	0.60			0.75		0.85		0.95	V
Maximum reverse current at rated DC blocking voltage per diode	@T _A =25℃	I _R	0.1								m A
	@T _A =120℃		15			10		30	5	2	
Typical Thermal Resistance		R θJC	3.0								℃/W
(Note 2) Storage Temperature		T _{STG}	- 55 -- + 150								℃
Operation Junction Temperature		T _j	- 55 -- + 125								℃

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

2.Thermal resistance from junction to case.

RATINGS AND CHARACTERISTIC CURVES

FIG.1 FORWARD CURRENT DERATING CURVE

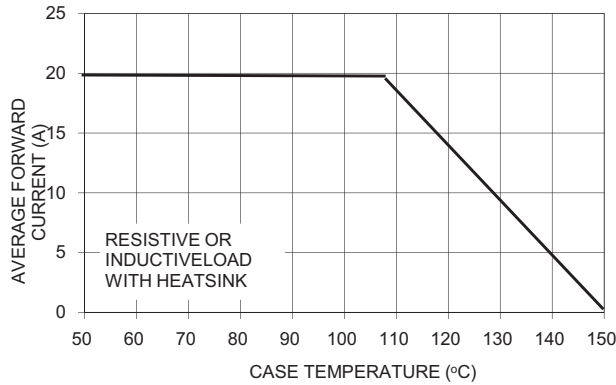


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

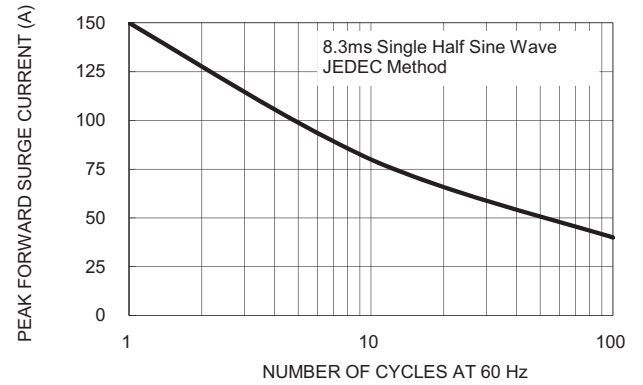


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

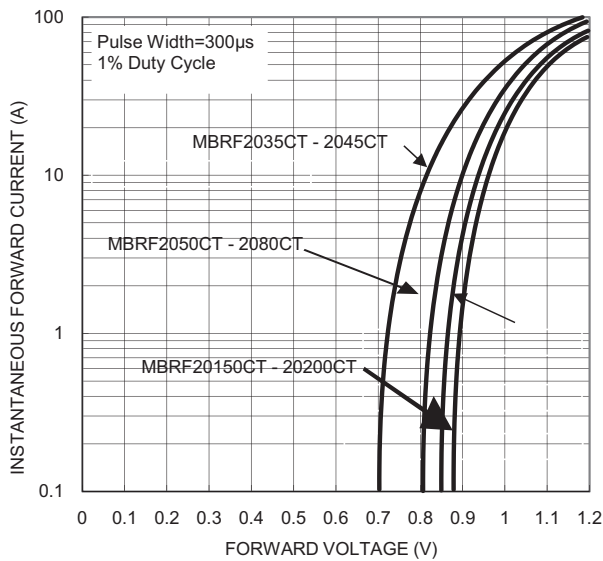


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

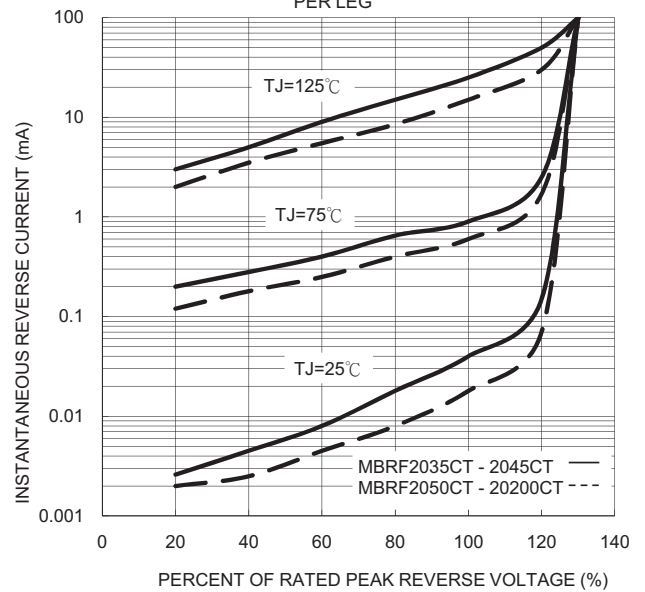


FIG. 5 TYPICAL JUNCTION CAPACITANCE PER LEG

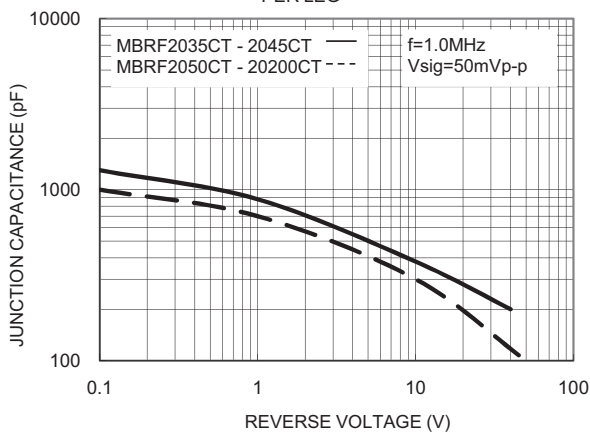


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG

