

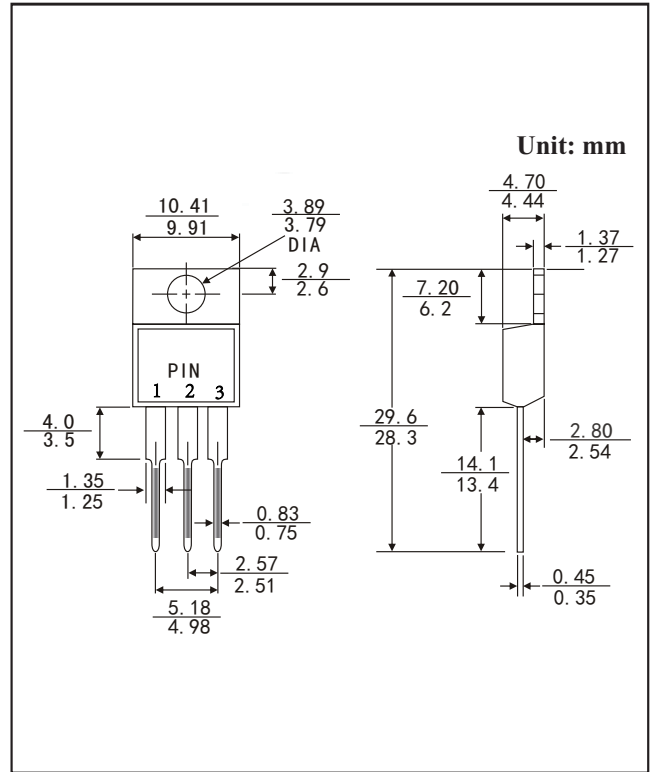
TO-220AB SCHOTTKY BARRIER RECTIFIER

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 2015/863 and WEEE 2012/19/EU

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)

TYPE NUMBER	SYMBOL	MBR	MBR	MBR	MBR	MBR	MBR	MBR	MBR	UNITS
		2020CT	2030CT	2040CT	2050CT	2060CT	2080CT	20100CT	20200CT	
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 Current 0.375"(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 forward voltage 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	@ $T_A=25^\circ C$	0.1								mA
	@ $T_A=120^\circ C$	15		10		30		5		
Typical Thermal Resistance	$R_{\theta JC}$	3.0								°C/W
(Note 2) Storage Temperature	T_{STG}	- 55 -- + 150								°C
Operation Junction Temperature	T_j	- 55 -- + 125								°C

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

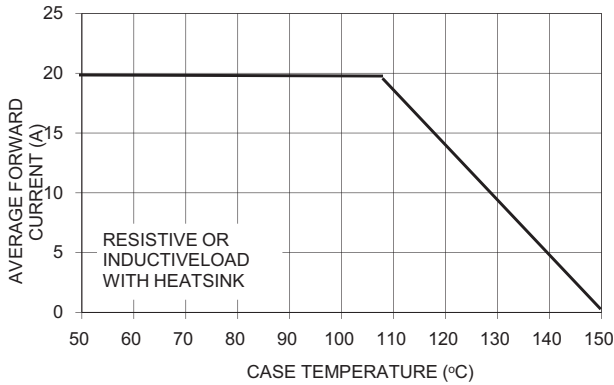


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

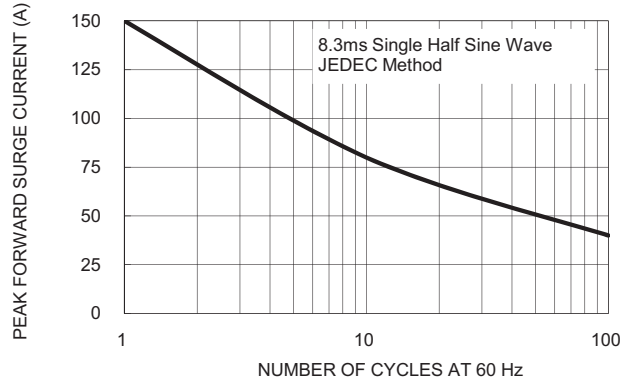


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

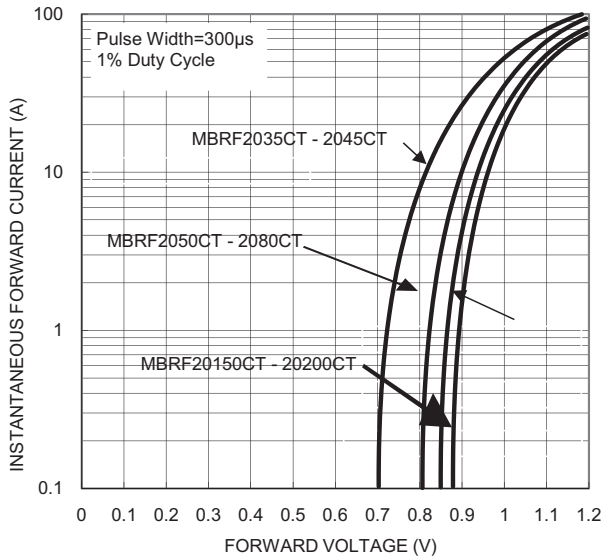


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

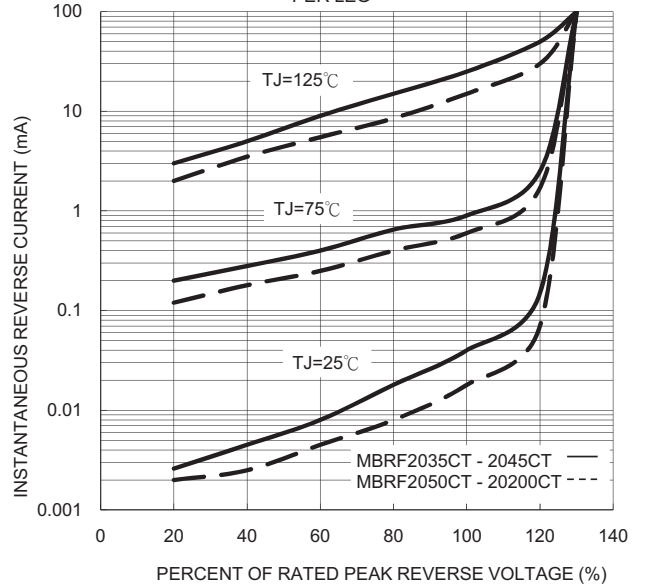


FIG. 5 TYPICAL JUNCTION CAPACITANCE PER LEG

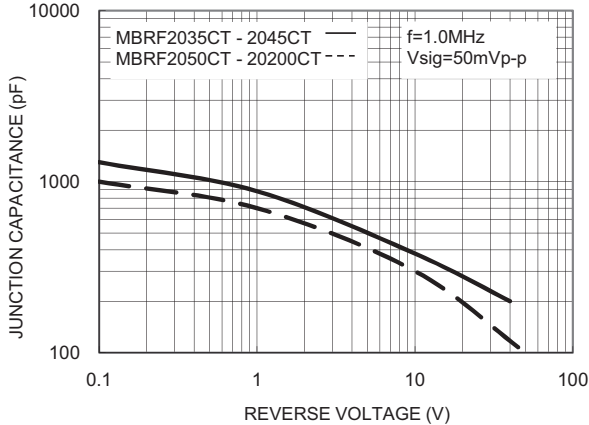


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG

