

SCHOTTKY BARRIER RECTIFIER

FEATURES

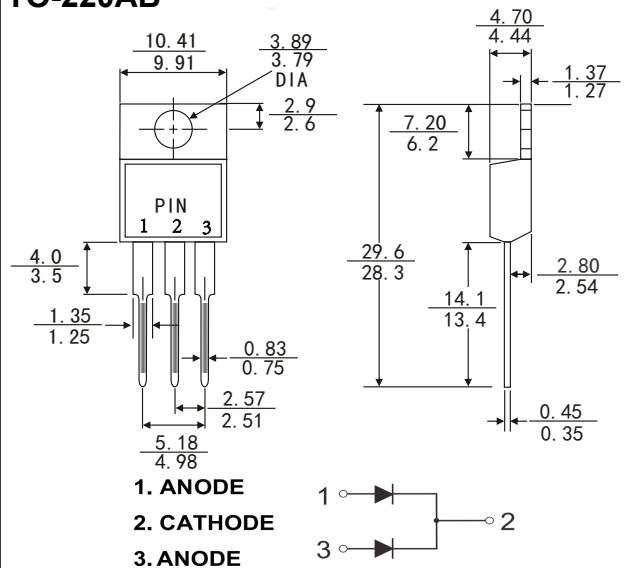
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260 ℃/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

TO-220AB

Unit: mm



MAXIMUM RATINGS AND CHARACTERISTICS

(Ratings at 25℃ ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load, derate by 20%.)

	Symbols	MBR 2020CT	MBR 2030CT	MBR 2040CT	MBR 2050CT	MBR 2060CT	MBR 2080CT	MBR 20100CT	MBR 20150CT	MBR 20200CT	Units	
Maximum repetitive peak reverse voltage	VRRM	20	30	40	50	60	80	100	150	200	Volts	
Maximum RMS voltage	VRMS	14	21	28	35	42	56	70	105	140	Volts	
Maximum DC blocking voltage	VDC	20	30	40	50	60	80	100	150	200	Volts	
Maximum average forward rectified current See Fig. 1	IAV	20.0									Amps	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	200.0									Amps	
Maximum instantaneous forward voltage at 10.0 A	VF	0.60			0.75		0.85		0.90	0.95	Volts	
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	Tc = 25°C	IR	0.2									mA
	Tc = 125°C		30			50						
Typical thermal resistance (Note 2)	ROJC	3.0									°C/W	
Operating junction temperature range	TJ	-65 to +150									°C	
Storage temperature range	TSTG	-65 to +150									°C	

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

2.Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

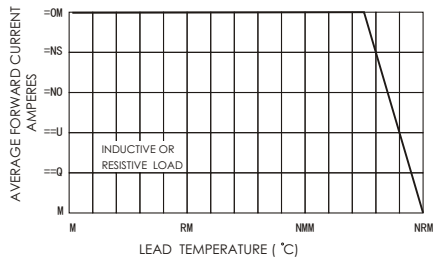


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

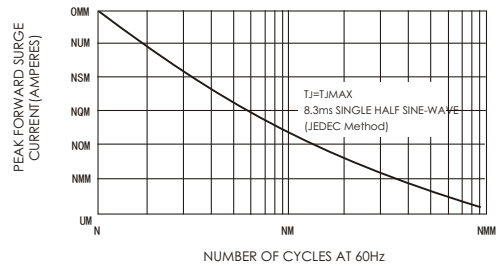


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

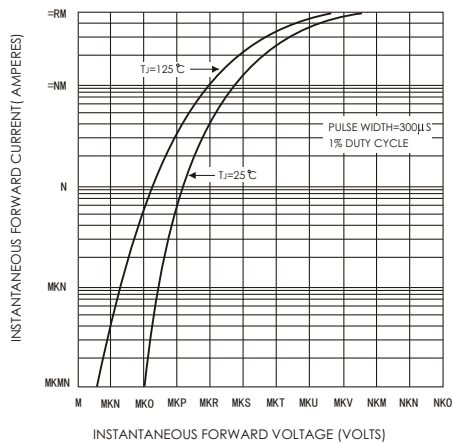


FIG.4-TYPICAL REVERSE CHARACTERISTICS

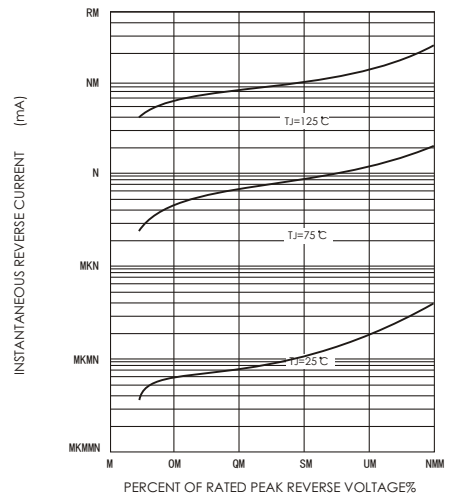


FIG.5-TYPICAL JUNCTION CAPACITANCE

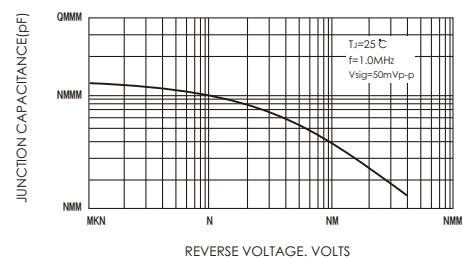


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

