

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 30 to 200 Volts

Forward Current - 40.0Amperes

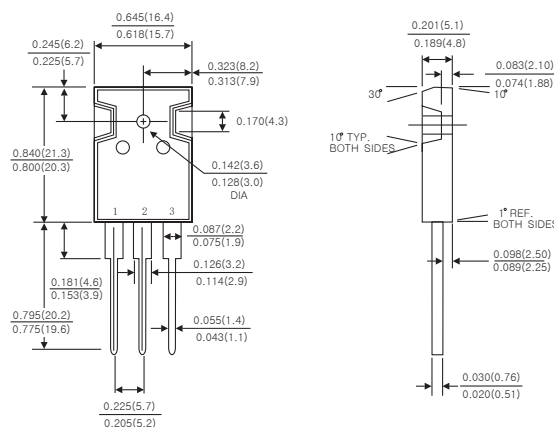
FEATURES

- 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
- Single rectifier construction
- 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, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2011/65/EU

MECHANICAL DATA

- Case: TO-247AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any

TO-247AD



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

		Symbols	SR 4020PT	SR 4030PT	SR 4040PT	SR 4045PT	SR 4050PT	SR 4060PT	SR 40100PT	SR 40150PT	SR 40200PT	Units
Maximum repetitive peak reverse voltage		VRRM	20	30	40	45	50	60	100	150	200	Volts
Maximum RMS voltage		VRMS	14	21	28	32	35	42	70	105	140	Volts
Maximum DC blocking voltage		VDC	20	30	40	45	50	60	100	150	200	Volts
Maximum average forward rectified current(see Fig.1)	Per leg	I(AV)	20.0 40.0									Amps
	Total device											
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		IFSM	300.0									Amps
Maximum instantaneous forward voltage at 40.0 A		VF	0.60				0.75		0.85	0.95		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	TA=25°C	IR	0.2									mA
	TA=125°C		30				50					
Typical thermal resistance (Note 2)		RθJC	3.0									°C/W
Operating junction temperature range		TJ	-55 to+150									°C
Storage temperature range		TSTG	-55 to+150									°C

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

2.Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

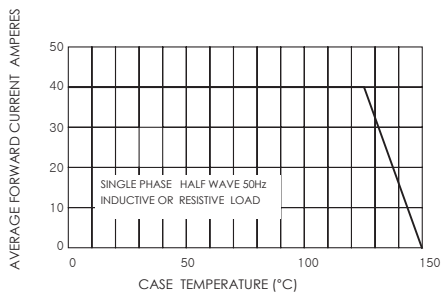


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

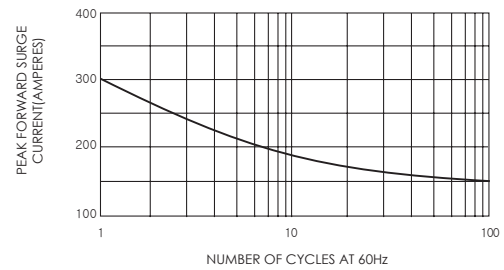


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

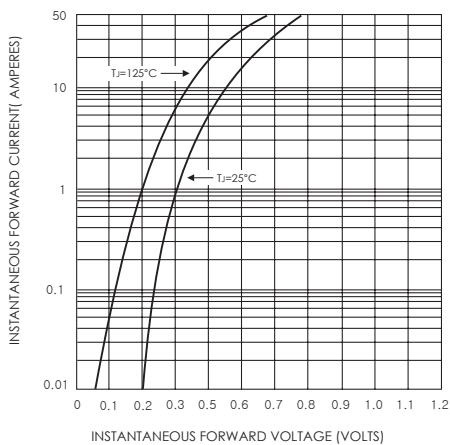


FIG.4-TYPICAL REVERSE CHARACTERISTICS

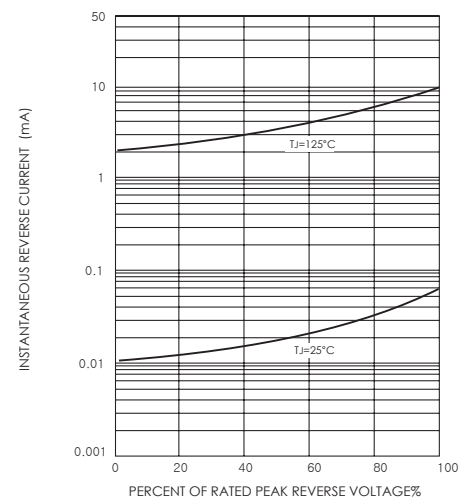


FIG.5-TYPICAL JUNCTION CAPACITANCE

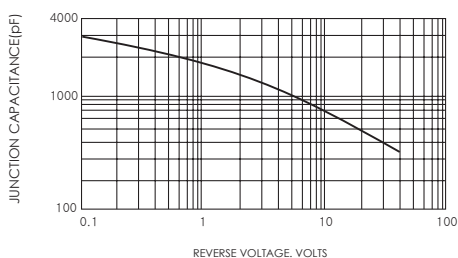


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

