

SCHOTTKY BARRIER RECTIFIER

REVERSE VOLTAGE: 20 TO 200 VOLTS
FORWARD CURRENT: 1.0 AMPERE

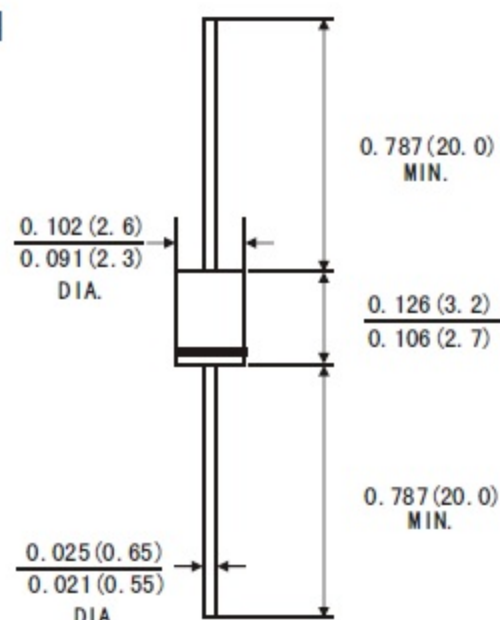
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- 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: R-1 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, method 2026
- Polarity: color band denotes cathode end
- Mounting Position: Any
- Weight: 0.007ounce,0.20 gram

R-1



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	1S20	1S30	1S40	1S50	1S60	1S80	1S100	1S150	1S200	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	57	71	105	140	Volts
Maximum DC blocking voltage		VDC	20	30	40	50	60	80	100	150	200	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length(see Fig. 1)		I(AV)	1.0									Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		IFSM	40.0									Amps
Maximum instantaneous forward voltage at 1.0 A(Note 1)		VF	0.55			0.70		0.85		0.90	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	TA=25℃	IR	0.2									mA
	TA=100℃		10									
Typical junction capacitance(Note 3)		CJ	110									pF
Typical thermal resistance(Note 2)		RθJA	50.0									℃/W
Operating junction temperature range		TJ	-65 to+150									℃
Storage temperature range		TSTG	-65 to+150									℃

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

2.Thermal resistance (from junction to ambient)Vertical P.C.B. mounted , 0.5"(12.7mm)lead length

3.Measured at 1.0MHz and reverse voltage of 4.0 volts

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

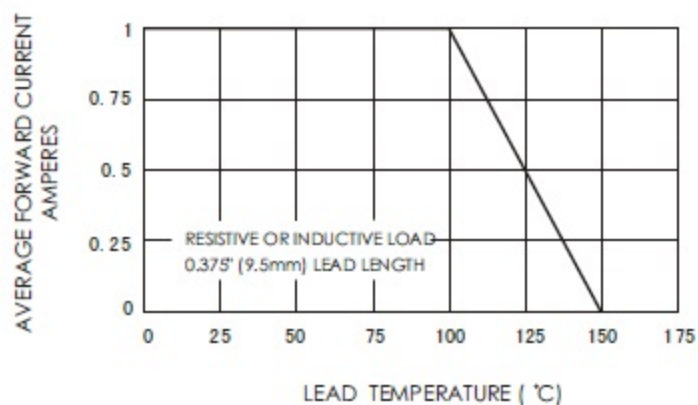


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

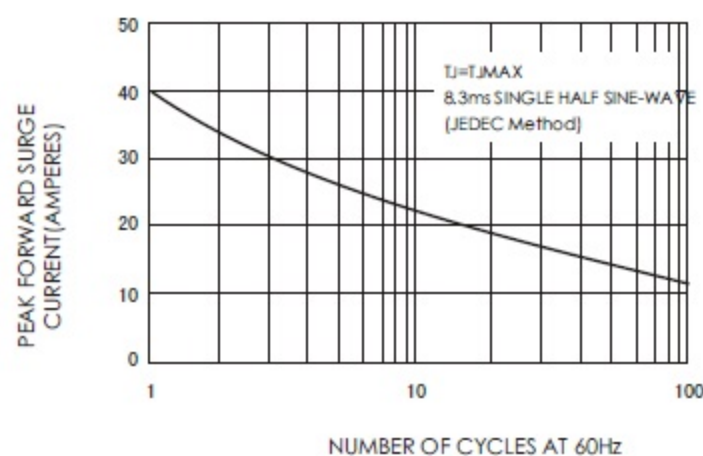


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

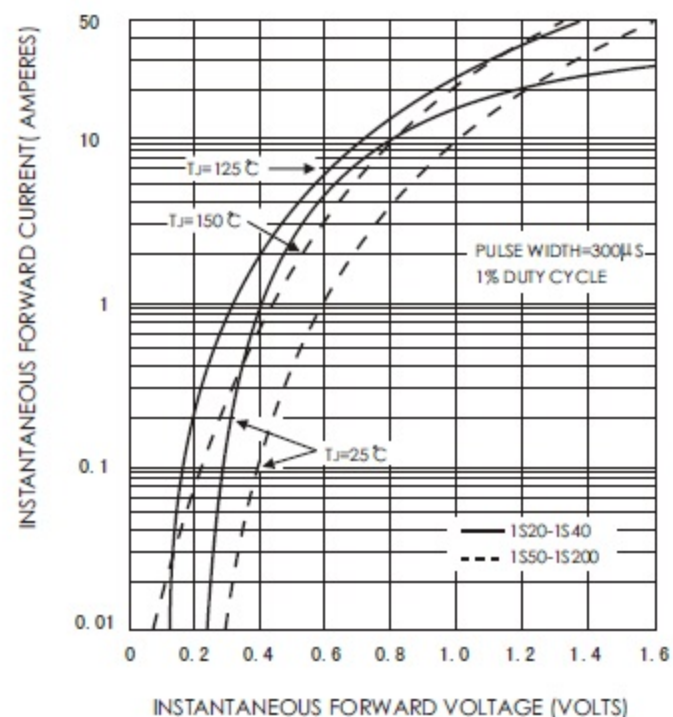


FIG.4-TYPICAL REVERSE CHARACTERISTICS

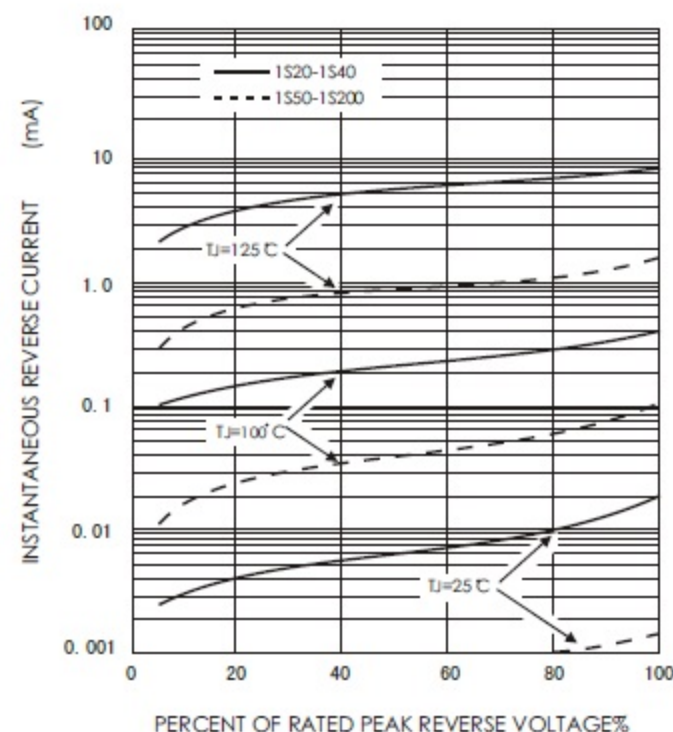


FIG.5-TYPICAL JUNCTION CAPACITANCE

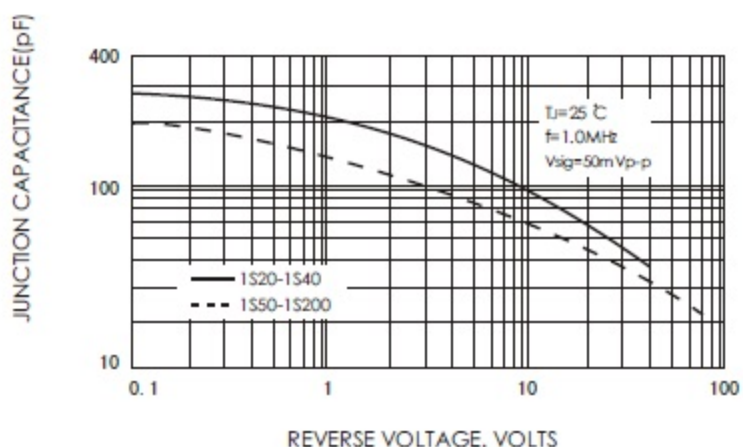


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

