

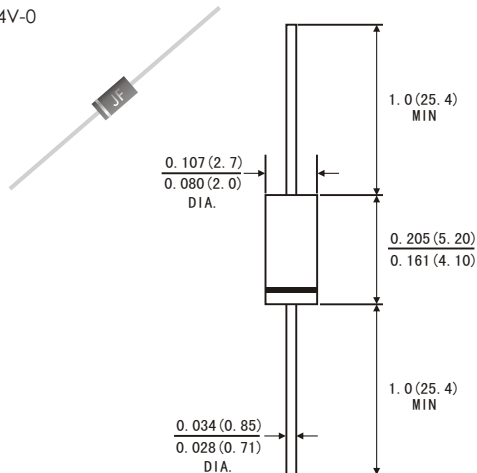
FEATURES

- 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: JEDEC DO-41 molded plastic body
- *Terminals*: Plated axial leads, solderable per MIL-STD-750,method 2026
- *Polarity*: Color band denotes cathode end
- *Mounting Position*: Any
- *Weight*: 0.012ounce, 0.33 gram

DO-41



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 120	SR 130	SR 140	SR 150	SR 160	SR 180	SR 1A0	SR 1150	SR 1200	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)	T _a =25℃ T _a =100℃	IR	0.5								mA	
			10									
Typical junction capacitance(Note 3)	C _J	110									pF	
Typical thermal resistance(Note 2)	R _{θJA}	50.0									℃/W	
	R _{θJL}	15.0										
Operating junction temperature range	T _J	-65 to+125				-65 to+150					℃	
Storage temperature range	T _{STG}	-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 , with 1.5 X1.5"(38X38mm)copper pads

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

RATINGS AND CHARACTERISTIC CURVES SR120 THRU SR1200

FIG.1-FORWARD CURRENT DERATING CURVE

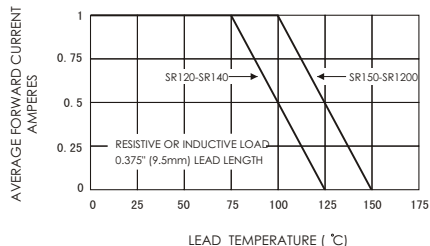


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

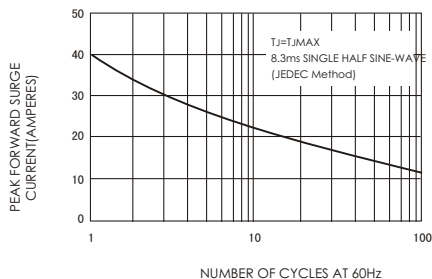


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

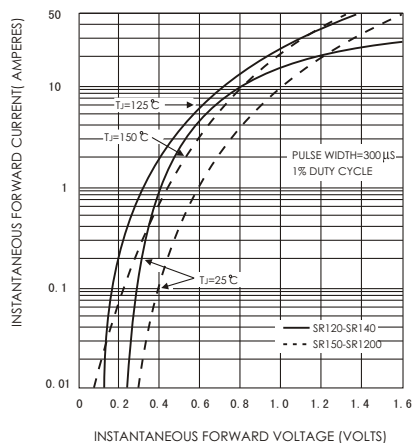


FIG.4-TYPICAL REVERSE CHARACTERISTICS

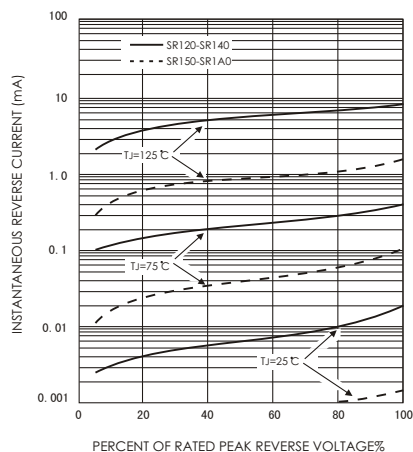


FIG.5-TYPICAL JUNCTION CAPACITANCE

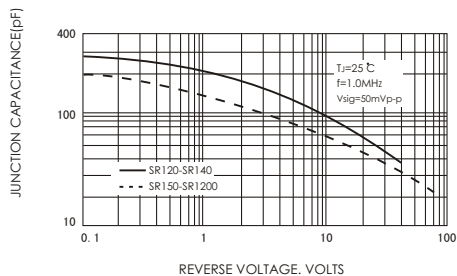


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

