



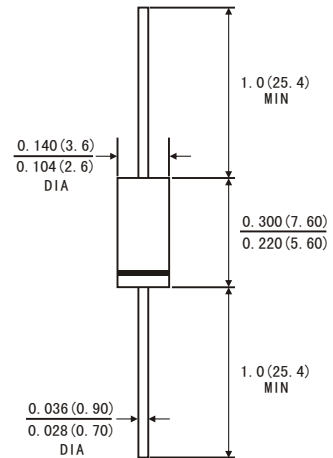
FEATURES

- 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

MECHANICAL DATA

- Case: JEDEC DO-15 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end
- Mounting Position: Any
- Weight: 0.014ounce, 0.39 gram

DO-15



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 320	SR 330	SR 340	SR 350	SR 360	SR 380	SR 3100	SR 3150	SR 3200	Units
Maximum repetitive peak reverse voltage		V _{RRM}	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS voltage		V _{RMS}	14	21	28	35	42	57	71	105	140	Volts
Maximum DC blocking voltage		V _{DC}	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)	3.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	80.0									Amps
Maximum instantaneous forward voltage at 3.0 A(Note 1)		V _F	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°C	I _R	0.2									mA
	T _a =100°C		20			10						
Typical junction capacitance(Note 3)		C _J	250			160						pF
Typical thermal resistance (Note 2)		R _{θJA} R _{θJL}	40.0 10.0									°C/W
Operating junction temperature range		T _J	-65 to+150									°C
Storage temperature range		T _{STG}	-65 to+150									°C

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

2.Thermal resistance from junction to lead vertical P.C.B. mounted , 0.5"(12.7mm)lead length with 2.5X2.5"(63.5X63.5mm)copper pads

3.Measured at 1MHz and reverse voltage of 4.0volts



FIG.1-FORWARD CURRENT DERATING CURVE

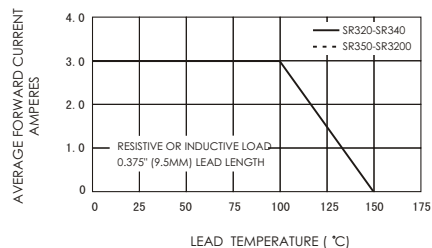


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

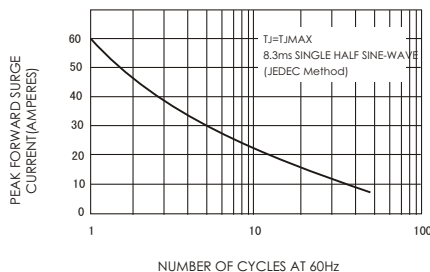


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

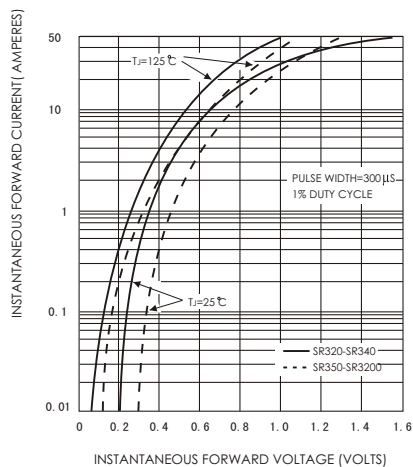


FIG.4-TYPICAL REVERSE CHARACTERISTICS

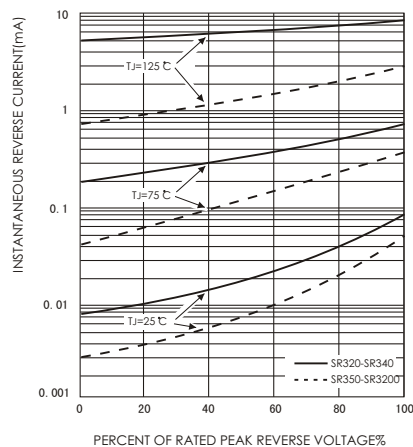


FIG.5-TYPICAL JUNCTION CAPACITANCE

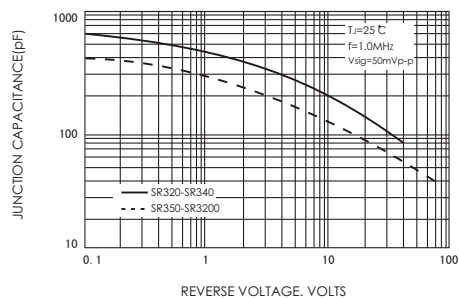


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

