



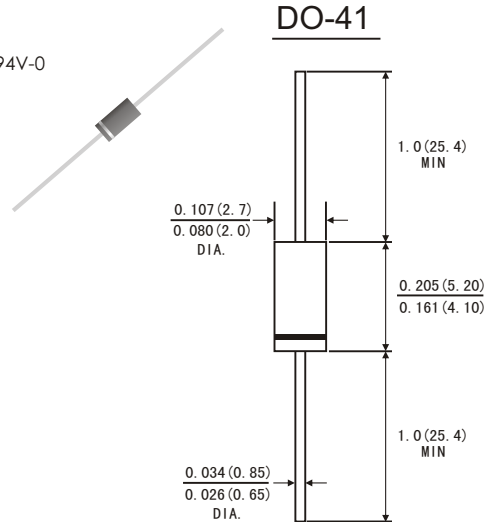
FEATURES

- 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

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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
- Weight: 0.012ounce, 0.33 gram



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 0620	SR 0630	SR 0640	SR 0650	SR 0660	SR 0680	SR 06100	Units
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	57	71	Volts
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length(see Fig. 1)	I(AV)	0.6							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	20.0							Amps
Maximum instantaneous forward voltage at 0.6 A(Note 1)	V _F	0.55		0.70		0.85		Volts	
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T _a =25°C	0.2							mA
	T _a =100°C	10							
Typical junction capacitance(Note 3)	C _J	110							PF
Typical thermal resistance(Note 2)	R _{θJA}	50.0							°C/W
	R _{θJL}	15.0							
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 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



FIG.1-FORWARD CURRENT DERATING CURVE

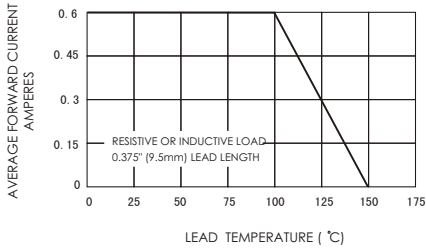


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

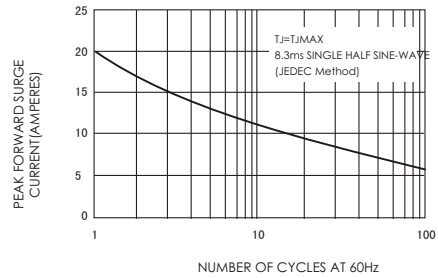


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

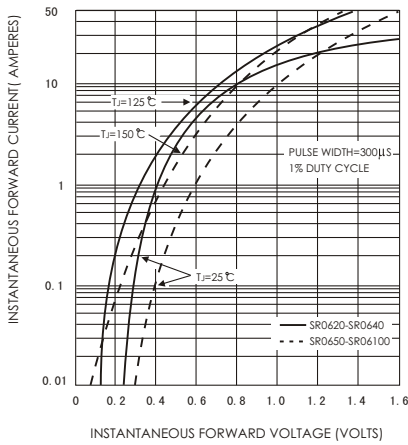


FIG.4-TYPICAL REVERSE CHARACTERISTICS

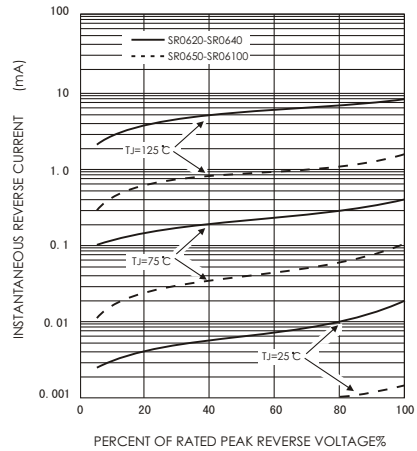


FIG.5-TYPICAL JUNCTION CAPACITANCE

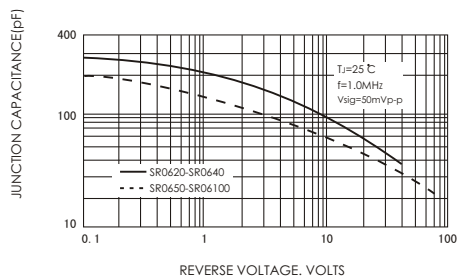


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

