

SR120 THRU SR1200

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts

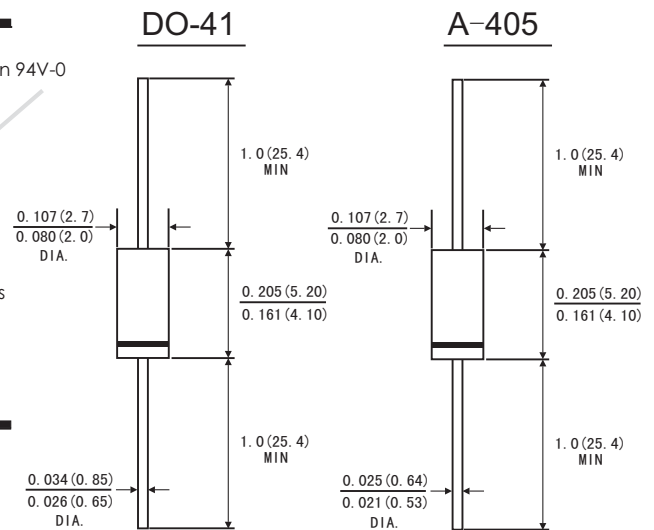
Forward Current - 1.0Ampere

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 2011/65/EU

MECHANICAL DATA

- Case: JEDEC DO-41/A-405 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any



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 160	SR 1100	SR 1150	SR 1200	Units
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	60	100	150	200	Volts
Maximum RMS voltage	V_{RMS}	14	21	28	42	71	105	140	Volts
Maximum DC blocking voltage	V_{DC}	20	30	40	60	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)	I_{FSM}	40.0							Amps
Maximum instantaneous forward voltage at 1.0 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)	$T_A=25^{\circ}C$	100			20				μA
	$T_A=100^{\circ}C$	5			-				mA
	$T_A=125^{\circ}C$	-			3				
Typical junction capacitance(Note 3)	C_J	110							pF
Typical thermal resistance(Note 2)	$R_{\theta JA}$	50.0							$^{\circ}C/W$
	$R_{\theta JL}$	15.0							
Operating junction temperature range	T_J	-55 to+150							$^{\circ}C$
Storage temperature range	T_{STG}	-55 to+150							$^{\circ}C$

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

RATINGS AND CHARACTERISTIC CURVES SR120 THRU SR1200

FIG.1-FORWARD CURRENT DERATING CURVE

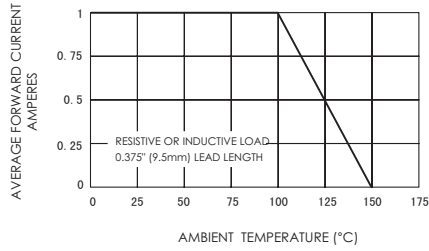


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

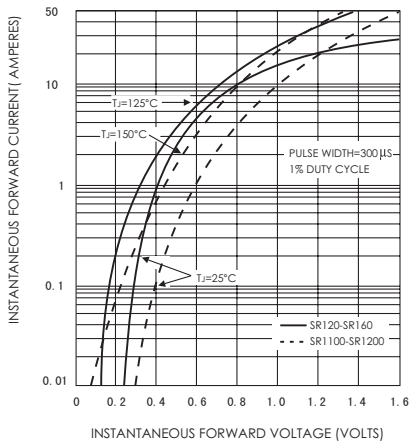


FIG.5-TYPICAL JUNCTION CAPACITANCE

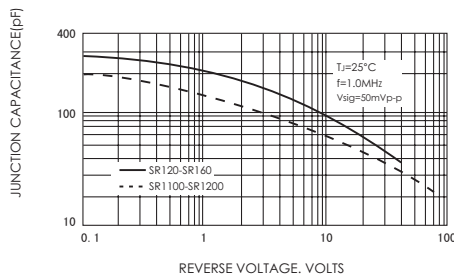


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

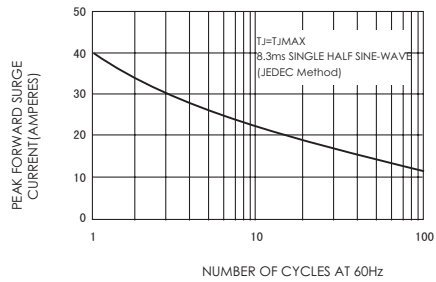


FIG.4-TYPICAL REVERSE CHARACTERISTICS

