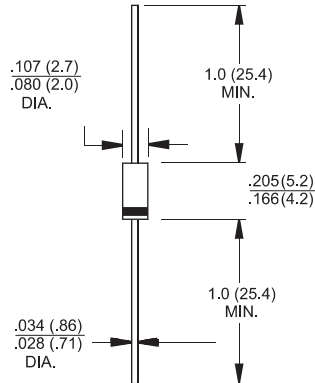
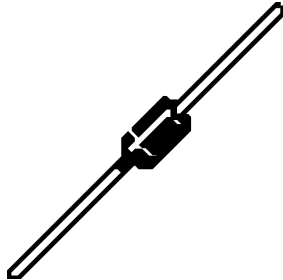


Description

Mechanical Dimensions

SR120 Series



DO-41

Dimensions in inches and (millimeters)

Features

Mechanical Data

- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ High reliability
- ◇ High surge current capability
- ◇ High temperature soldering guaranteed: 260C/10sec/0.375"(9.5mm) lead lengths at 5 lbs(2.3kg) tension
- ◇ Cases: DO-41 molded plastic
- ◇ Epoxy: UL 94V-O rate flame retardant
- ◇ Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- ◇ Polarity: Color band denotes cathode end
- ◇ Weight: 0.33grams

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	SR 120	SR 130	SR 140	SR 150	SR 160	SR 190	SR 1100	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	90	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	63	70	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	90	100	V
Maximum Average Forward Rectified Current See Fig. 1	$I_{(AV)}$	1.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	40					30		A
Maximum Instantaneous Forward Voltage @ 1.0A	V_F	0.55			0.70		0.80		V
Maximum D.C. Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$	I_R	0.5					0.05		mA
		10					-		mA
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	90							$^\circ\text{C}/\text{W}$
Typical Junction Capacitance (Note 2)	C_j	80			65		28		pF
Operating Junction Temperature Range	T_J	- 65 to +125				-65 to +150			$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150							$^\circ\text{C}$

Notes: 1. Mount on Cu-Pad Size 5mm x 5mm on P.C.B.

2. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (SR120THUR SR110)

FIG.1- FORWARD CURRENT DERATING CURVE

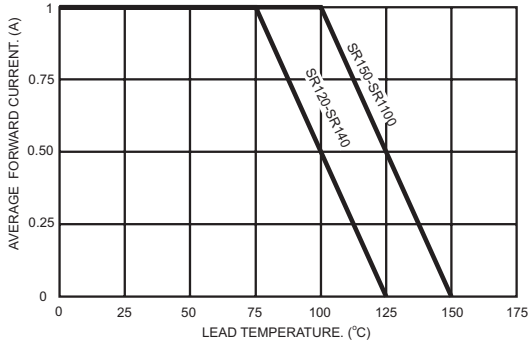


FIG.2- TYPICAL FORWARD CHARACTERISTICS

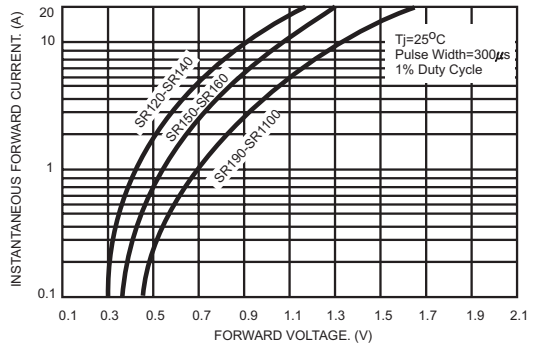


FIG.3- TYPICAL REVERSE CHARACTERISTICS

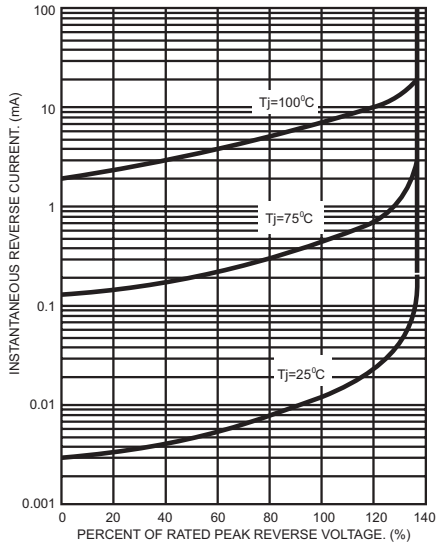


FIG.4- TYPICAL JUNCTION CAPACITANCE

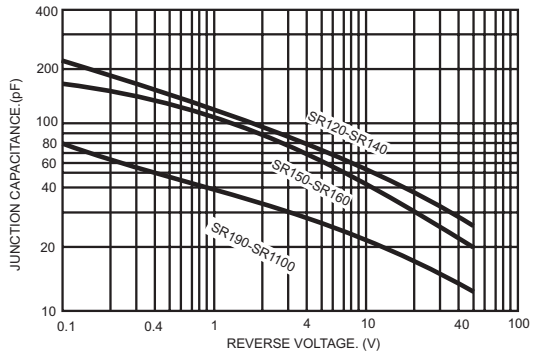


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

