WEITRON

SR120 thru SR1100

Axial Lead General Purpose Plastic Rectifier

Lead(Pb)-Free

GENERAL PURPOSE RECTIFIERS
1.0 AMPERES
20-100 VOLTS

Features:

* Low forward voltage drop.
* High current capability.
* High reliability.
* High surge current capability.
* Epitaxial construction.

DO-41

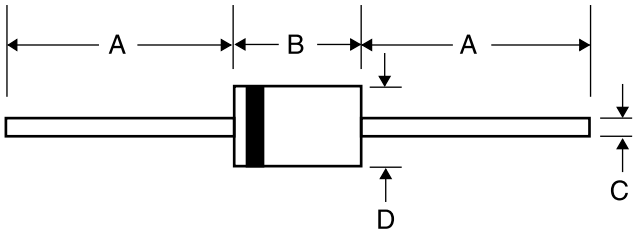
Mechanical Data:

* Case: Molded plastic.
* Epoxy: UL 94V-0 rate flame retardant.
* Lead: Axial leads, solderable per MIL-STD-202, method 208 guranteed.
* Polarity: Color band denotes cathode end.
* Mounting position: Any.
* Weight: 0.34 grams.

DO-41 Outline Dimensions

Unit:mm

Axial Device (Through-Hole)



	A		B		C		D	
Dim	Min	Max	Min	Max	Min	Max	Min	Max
DO-41	25.40	-	4.06	5.20	0.70	0.90	2.00	2.70

Maximum Rating

Characteristic	Symbol	SR120	SR130	SR140	SR150	SR160	SR180	SR1100	Uuits
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	V
Maximum DC blocking voltage	V_{DC}	20	30	50	50	60	80	100	V
Maximum average forward rectified current	I_{AV}	1.0							A
Peak forward surge current 8.3mS single half sine-wave superimposedonrated load	I_{FSM}	30							A
Typical thermal resistance[1]	$R_{\theta JA}$	50							°C/W
Operating junction temperature range	T_J	-65 to +125			-65 to +150				°C
storage temperature range	T_{STG}	-65 to +150							°C

Electrical Characteristic

Characteristic	Symbol	SR120	SR130	SR140	SR150	SR160	SR180	SR1100	Uuits
Maximum Instanatneous Forward Voltage I_F=1.0A	V_F	0.55			0.70		0.85		V
Maximum DC Reverse Current Rated DC Blocking Voltage, T_A=25°C Rated DC Blocking Voltage, T_A=100°C	I_R	1.0 10							mA
Typical Junction Capacitance V_R=4.0V, f=1.0MHz	C_P	110							pF

Notes 1. Thermal Resistance Junction to Ambient Vertical PC Board Mounting 0.5"(12.7mm) Lead Length.

Ratings and Characteristics Curves

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

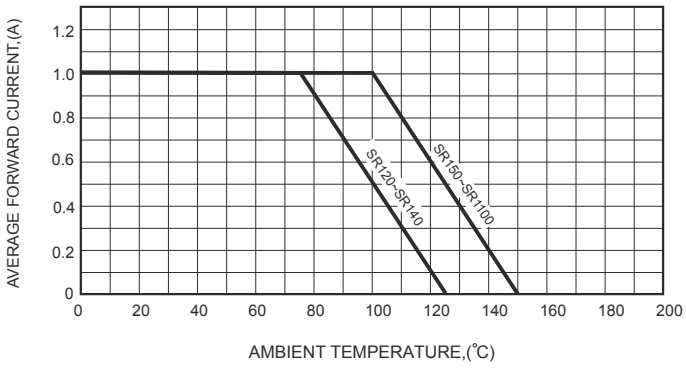


FIG.2-TYPICAL FORWARD CHARACTERISTICS

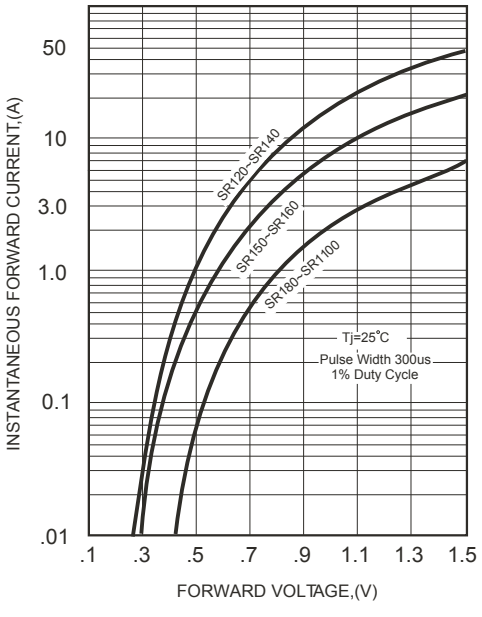


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

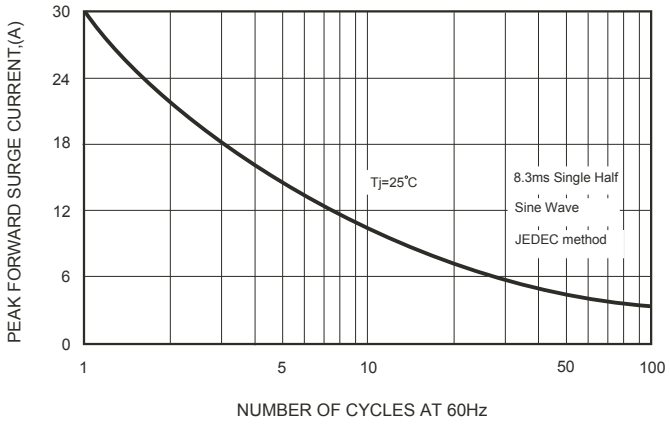


FIG.4-TYPICAL JUNCTION CAPACITANCE

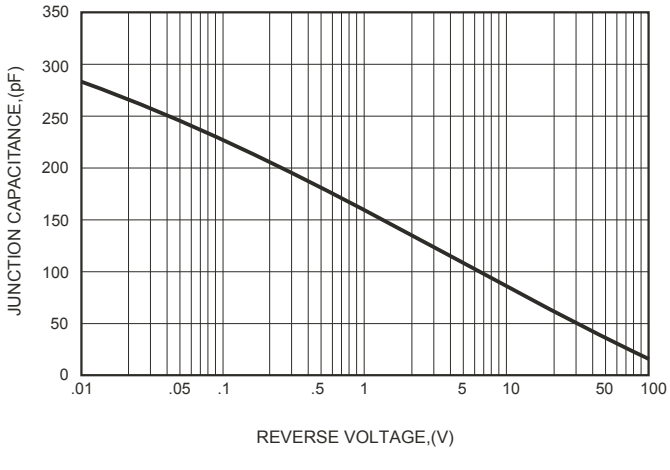


FIG.5 - TYPICAL REVERSE CHARACTERISTICS