SR120 THRU SR1200

Reverse Voltage - 20 to 200 Volts Forward Current - 1.0 Ampere

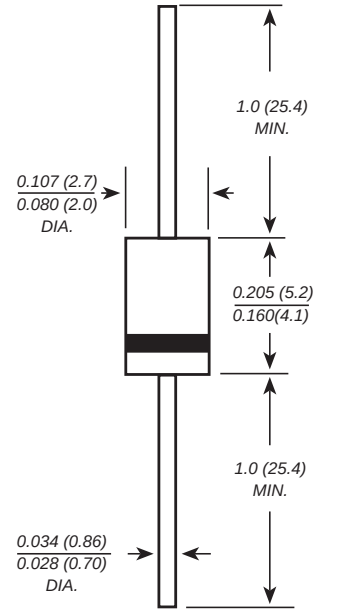
SCHOTTKY BARRIER RECTIFIER

Features

DO-41

RoHS COMPLIANT

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction,majority carrier conduction
- Low power loss,high efficiency
- High forward surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds,0.375”(9.5mm) lead length, 5 lbs. (2.3kg) tension



Dimensions in inches and (millimeters)

Mechanical Data

Case : JEDEC DO-41 Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
Polarity : Color band denotes cathode end
Mounting Position : Any
Weight : 0.012 ounce, 0.33 grams

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unlss otherwise specified.

Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Parameter / Marking Code	SYMBOLS	SR 120	SR 130	SR 140	SR 150	SR 160	SR 170	SR 180	SR 190	SR 1100	SR 1150	SR 1200	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	70	80	90	100	150	200	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	49	56	63	70	105	140	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	70	80	90	100	150	200	V
Maximum average forward rectified current 0.375”(9.5mm) lead length(see fig.1)	$I_{(AV)}$	1.0											A
Peak forward surge current 8.3ms single half sine-wave superimposed onrated load (JEDEC Method)	I_{FSM}	40											A
Maximum instantaneous forward voltage at 1.0A	V_F	0.55			0.70		0.85					0.95	V
Maximum DC reverse current T_A=25℃	I_R	0.5									0.2		mA
at rated DC blocking voltage T_A=100℃		10.0					5.0				2.0		
Typical junction capacitance (NOTE 1)	C_J	110			80								pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	50.0											℃/W
Operating junction and storage	T_J	-50 to +125					-50 to +150						℃
Storage temperature range	T_{STG}	-50 to +150											℃

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2.Thermal resistance from junction to ambient at 0.375”(9.5mm)lead length,P.C.B. mounted

Ratings And Characteristic Curves

FIG. 1- FORWARD CURRENT DERATING CURVE

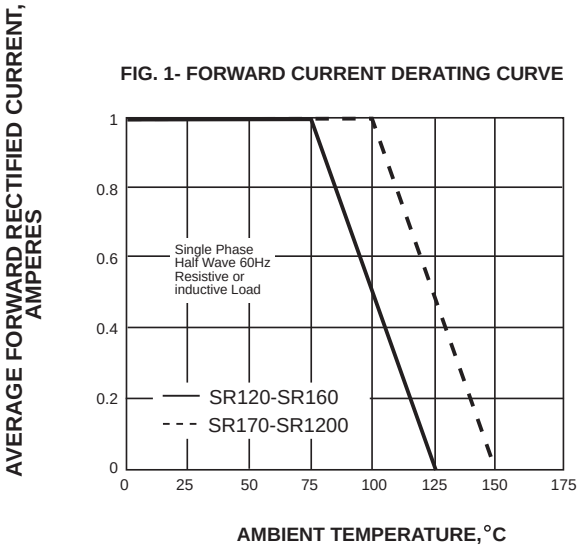


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

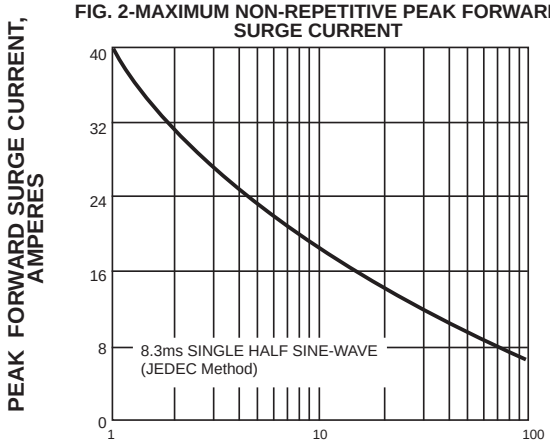


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

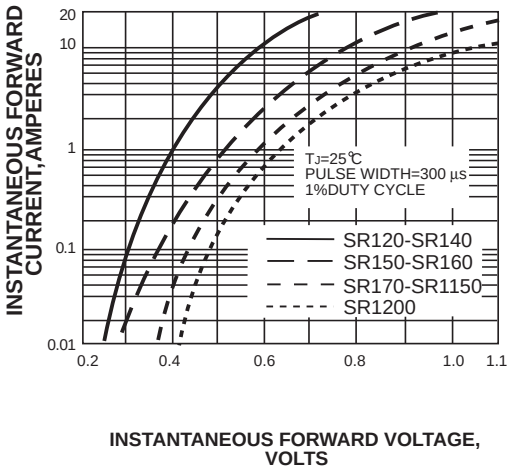


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

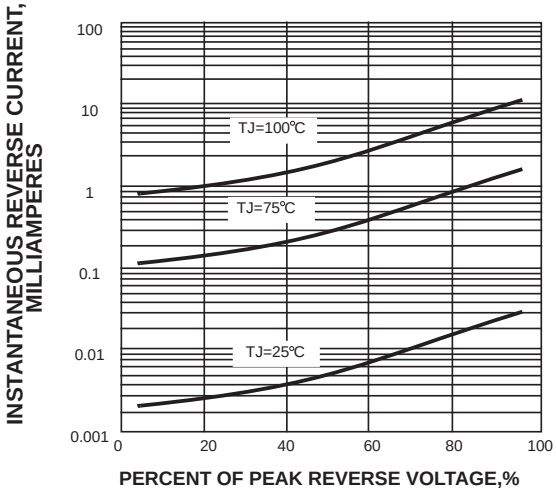


FIG. 5-TYPICAL JUNCTION CAPACITANCE

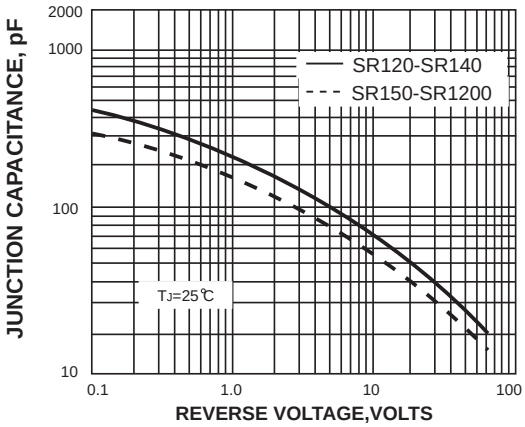
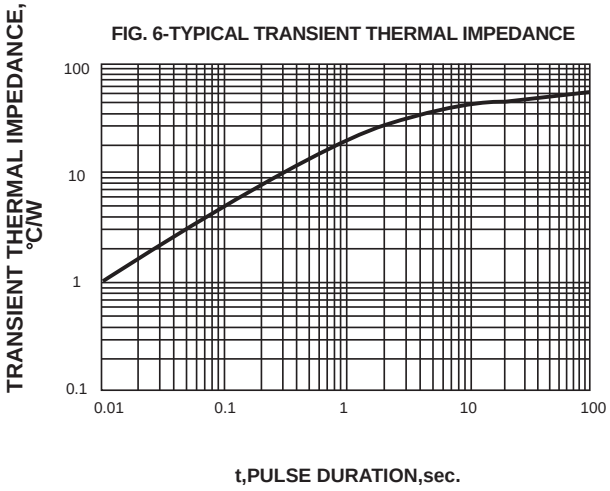


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



The curve above is for reference only.