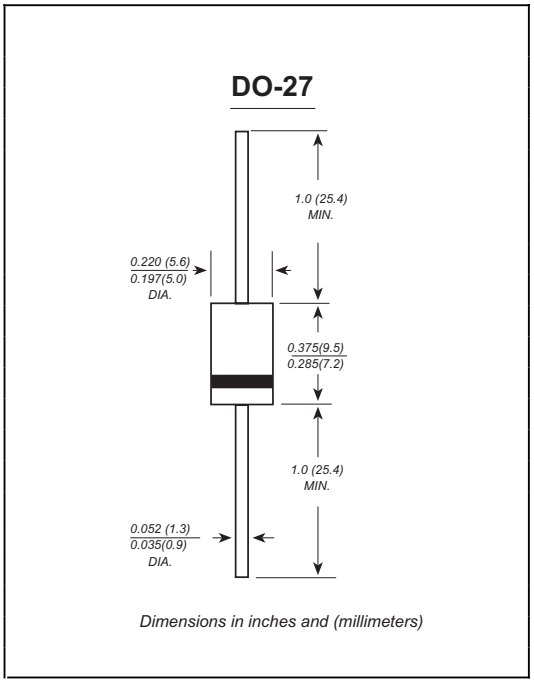
SR320~SR3200

3.0Amp Schottky Barrier Rectifiers

Features

- 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



Mechanical Data

Case: JEDEC DO-27 molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.04 ounce, 1.10 grams

Maximum Ratings And Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified. Single phase half-wave 60Hz,resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	SR 320	SR 330	SR 340	SR 350	SR 360	SR 370	SR 380	SR 390	SR 3100	SR 3150	SR 3200	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	70	80	90	100	150	200	VOLTS
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	49	56	63	70	105	140	VOLTS
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	70	80	90	100	150	200	VOLTS
Maximum average forward rectified current 0.375″(9.5mm) lead length(see fig.1)	$I_{(AV)}$	3.0											Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80.0											Amps
Maximum instantaneous forward voltage at 3.0A	V_F	0.55			0.70		0.85					0.95	Volts
Maximum DC reverse current T_A=25℃	I_R	0.5									0.2		mA
at rated DC blocking voltage T_A=100℃		20.0					10.0				2.0		
Typical junction capacitance (NOTE 1)	C_J	250			160								pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	40.0											°C/W
Operating junction temperature range	T_J,	-65 to +125					-65 to +150						°C
Storage temperature range	T_{STG}	-65 to +150											°C

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

FIG. 1- FORWARD CURRENT DERATING CURVE

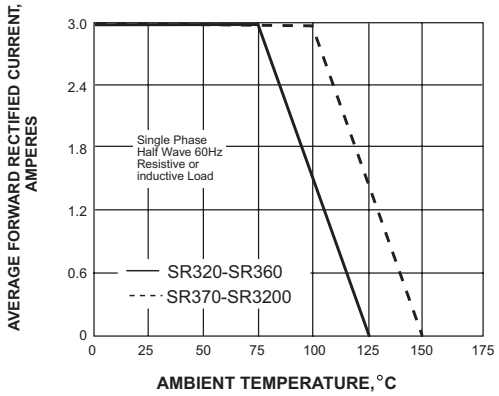


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

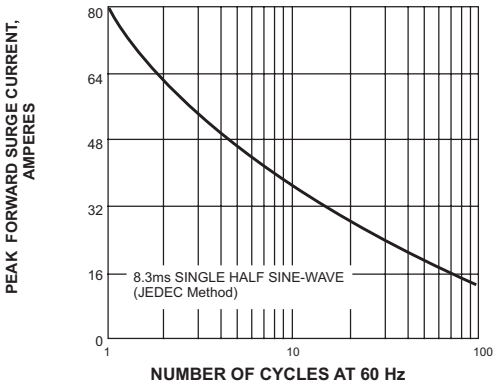


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

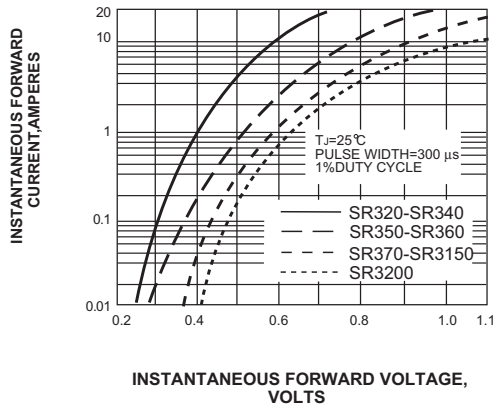


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

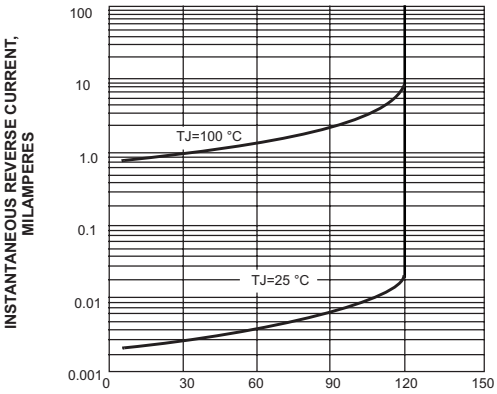


FIG. 5-TYPICAL JUNCTION CAPACITANCE

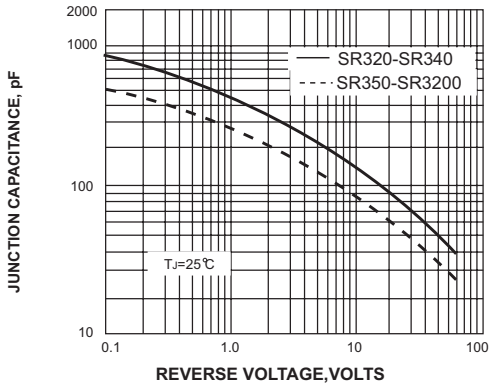


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

