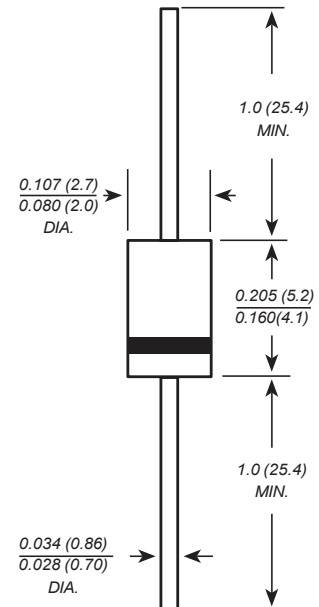


SCHOTTKY BARRIER RECTIFIER

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

DO-41



Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

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

Parameter	SYMBOLS	SR 120	SR 130	SR 140	SR 150	SR 160	SR 170	SR 180	SR 190	SR 1100	SR 1150	SR 1200	UNITS	
Marking Code		SR 120	SR 130	SR 140	SR 150	SR 160	SR 170	SR 180	SR 190	SR 1100	SR 1150	SR 1200		
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℃ at rated DC blocking voltage T _A =100℃	I _R	0.5							0.2		mA			
		10.0				5.0			2.0					
Typical junction capacitance (NOTE 1)	C _J	110			80									pF
Typical thermal resistance (NOTE 2)	R _{θJA}	50.0											℃/W	
Operating junction and storage	T _J	-50 to +125					-50 to +150						℃	
Storage temperature range	T _{STG}	-50 to +150											℃	

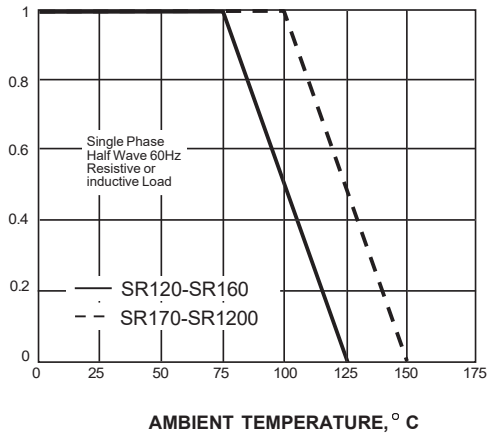
Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

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

Ratings And Characteristic Curves

AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



PEAK FORWARD SURGE CURRENT,
AMPERES

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

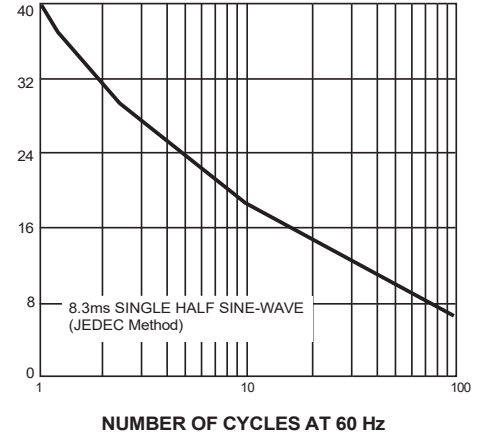
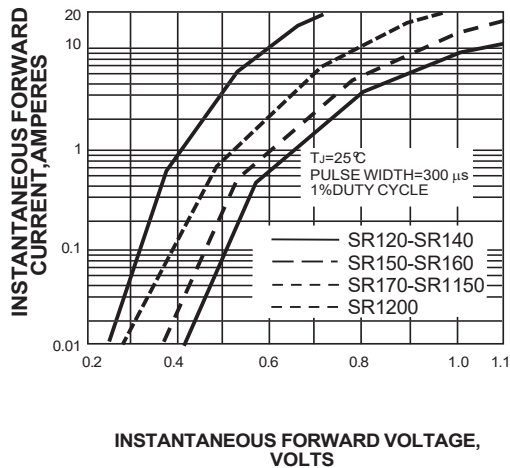


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

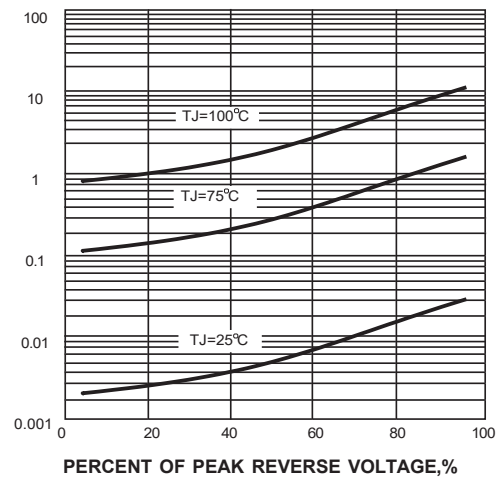
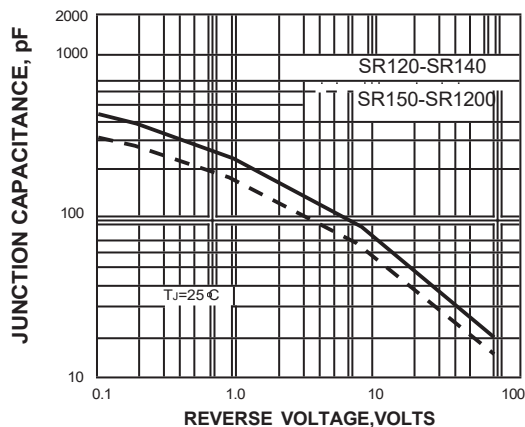
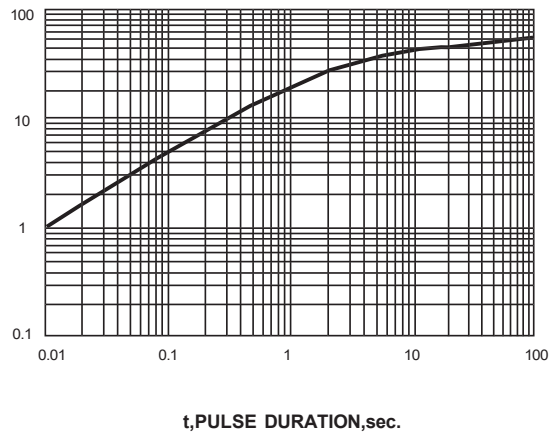


FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE,
°C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



The curve above is for reference only.