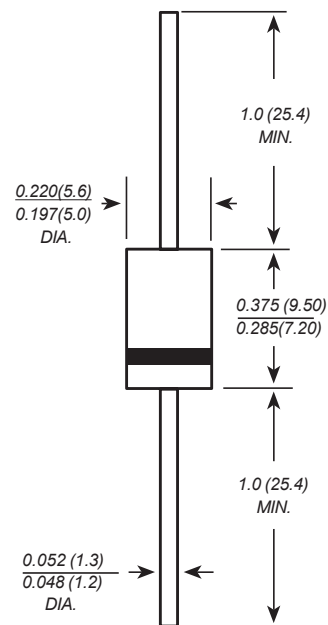


SCHOTTKY BARRIER RECTIFIER

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-201AD



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													UNITS
Marking Code		SR520	SR530	SR540	SR550	SR560	SR570	SR580	SR590	SR5100	SR5150	SR5200		
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)	5.0											A	
Peak forward surge current 8.3ms single half sine-wave superimposed onrated load (JEDEC Method)	I _{FSM}	150											A	
Maximum instantaneous forward voltage at 5.0A	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	
		20.0				10.0			2.0					
Typical junction capacitance (NOTE 1)	C _J	500			400									pF
Typical thermal resistance (NOTE 2)	R _{θJA}	25.0											℃/W	
Operating junction and storage	T _J	-50 to +125					-50 to +150						℃	
Storage temperature range	T _{STG}	-50 to +150											℃	

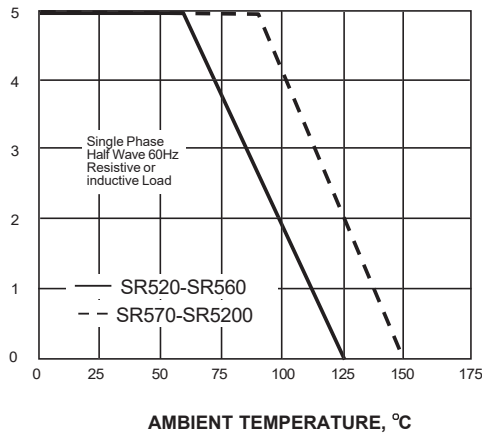
Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

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

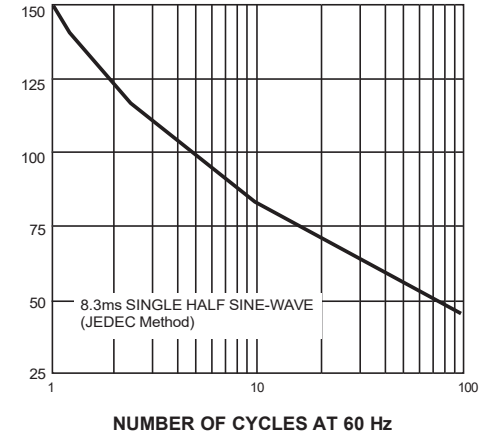


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

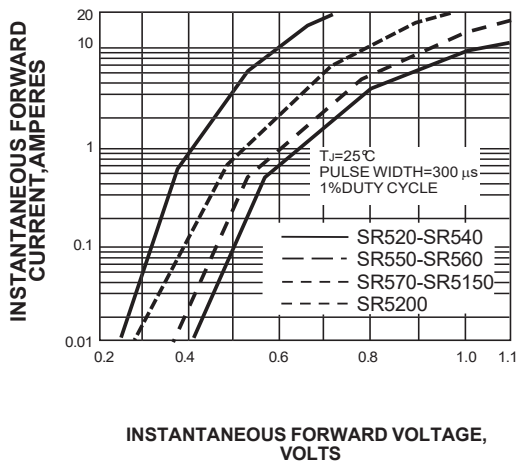


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES

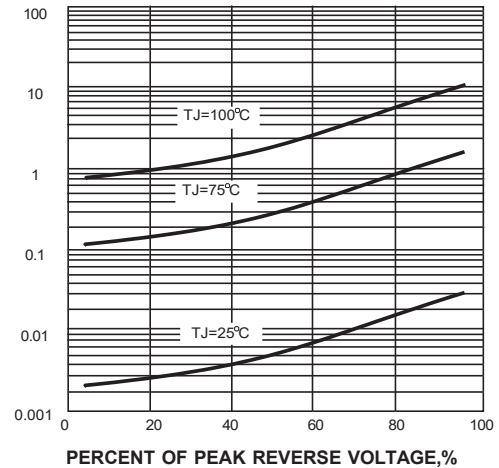
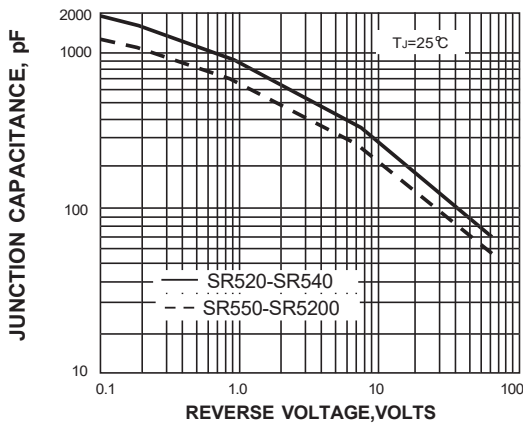
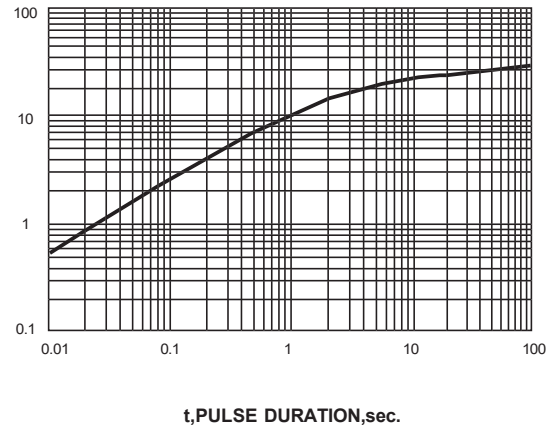


FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE,
°C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



The curve above is for reference only.