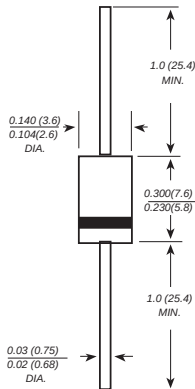


DO-15



Dimensions in inches and (millimeters)

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:
260°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-15 molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.014 ounce, 0.40 grams

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%.

	SYMBOLS	SR 220	SR 230	SR 240	SR 250	SR 260	SR 270	SR 280	SR 290	SR 2100	SR 2150	SR 2200	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	100	200	VOLTS	
Maximum average forward rectified current 0.375”(9.5mm) lead length(see fig.1)	I _(AV)	2.0											Amp	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	60.0											Amps	
Maximum instantaneous forward voltage at 2.0A	V _F	0.55			0.70			0.85				0.95	Volts	
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	0.5						0.2				mA		
		10.0					5.0				2.0			
Typical junction capacitance (NOTE 1)	C _J	220			80									pF
Typical thermal resistance (NOTE 2)	R _{θJA}	50.0											°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

AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE

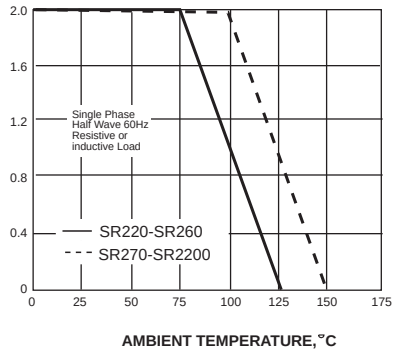
PEAK FORWARD SURGE CURRENT,
AMPERES

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

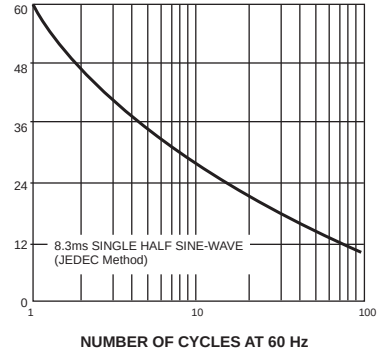


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

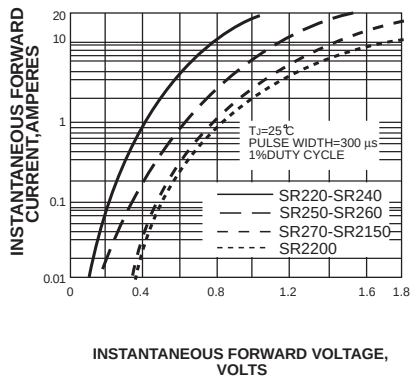
INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

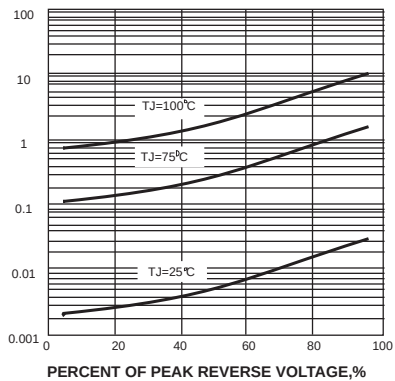


FIG. 5-TYPICAL JUNCTION CAPACITANCE

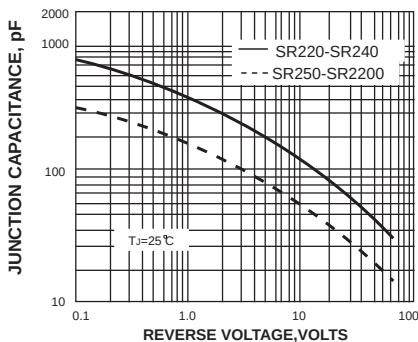
TRANSIENT THERMAL IMPEDANCE,
 $^\circ\text{C}/\text{W}$

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

