



PINGWEI ENTERPRISE

SR120/SB120 THRU SR1200/SB1200

1.0AMP. SCHOTTKY BARRIER RECTIFIERS

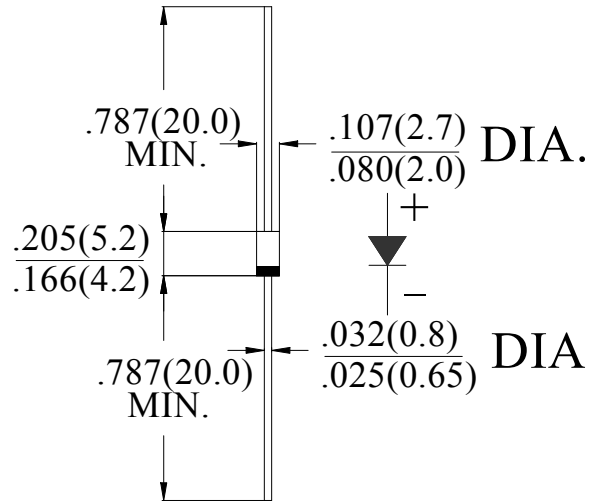
FEATURE

- . High current capability
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High surge capability
- . High temperature soldering guaranteed
260°C /10sec/ 0.375" lead length at 5 lbs tension

MECHANICAL DATA

- . Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
- . Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
- . Polarity: color band denotes cathode
- . Mounting position: any

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, derate current by 20%

Type Number	SYM BOL	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	unit s
		120	130	140	150	160	180	190	1100	1150	1200	
		SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	90	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	63	70	105	140	V
Maximum DC blocking Voltage	V_{DC}	20	30	40	50	60	80	90	100	150	200	V
Maximum Average Forward Rectified Current .375"(9.5mm) lead length at $T_L = 90^\circ\text{C}$	$I_{F(AV)}$	1.0										A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30.0										A
Maximum Forward Voltage at 1.0A DC	V_F	0.45	0.55	0.70	0.85			0.95			V	
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ at rated DC blocking voltage @ $T_A = 100^\circ\text{C}$	I_R	0.5					0.1					mA
Typical Junction Capacitance (Note 1)	C_J	110					28					pF
Typical Thermal Resistance (Note 2)	$R_{(JA)}$	75										$^\circ\text{C}/\text{W}$
Storage Temperature	T_{STG}	-55 to +150										$^\circ\text{C}$
Operation Junction Temperature	T_J	-55 to +125					-55 to +150					$^\circ\text{C}$

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) lead length, vertical P.C.Board Mounted.

RATING AND CHARACTERISTIC CURVES (SR120/SB120 THRU SR1200/SB1200)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

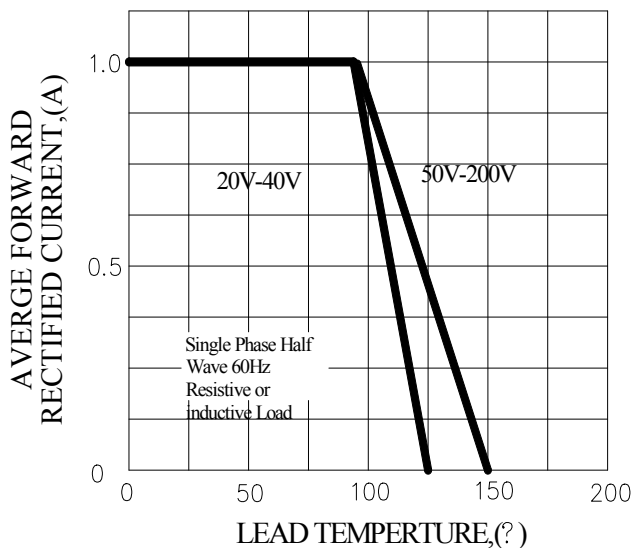


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

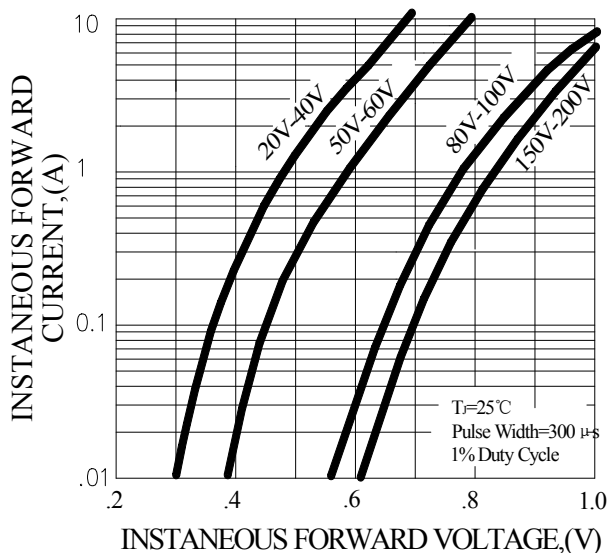


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

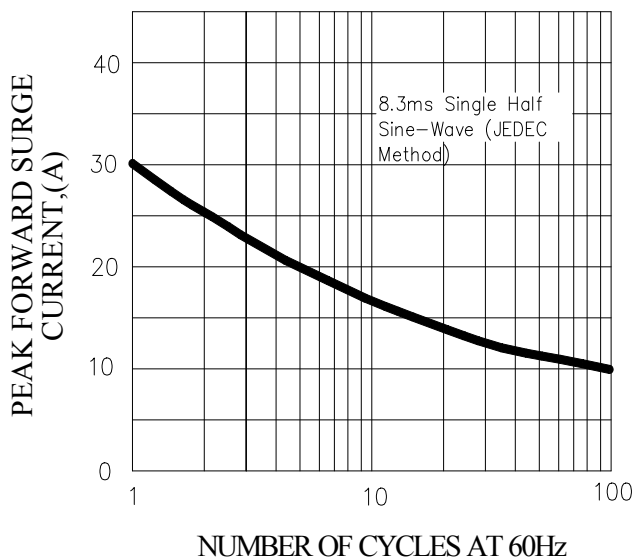


FIG.4-TYPICAL REVERSE CHARACTERISTICS

