



PINGWEI ENTERPRISE

## SR520/SB520 THRU SR5200/SB5200

### 5.0AMPS. SCHOTTKY BARRIER RECTIFIERS

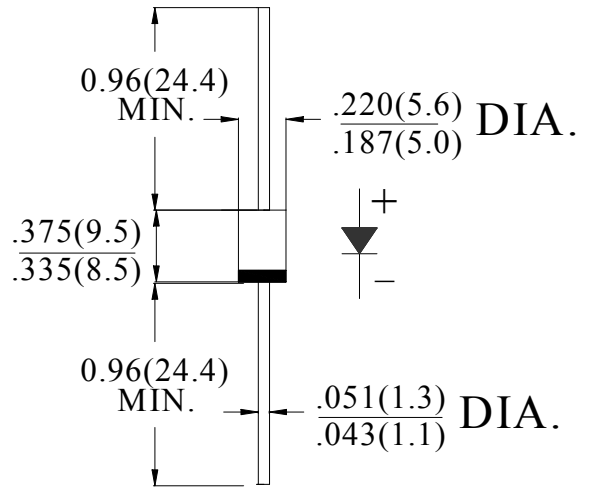
#### FEATURE

- . 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-27/DO-201AD



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%

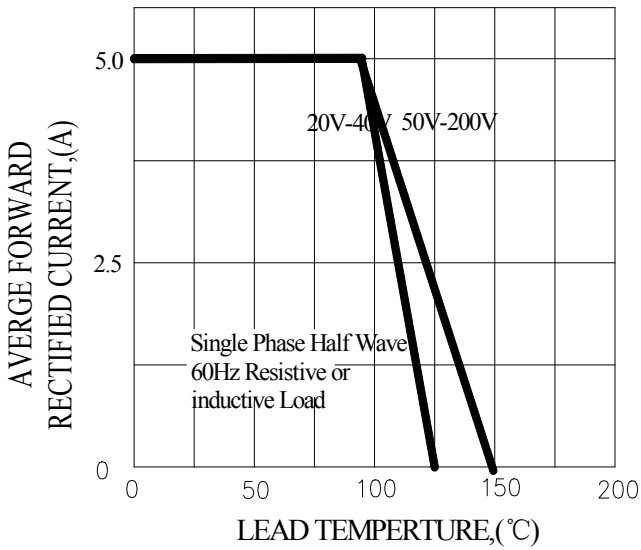
Type Number	SYM BOL	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	units
		520	530	540	550	560	580	590	5100	5150	5200	
		SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	90	100	150	200	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	63	70	105	140	V
Maximum DC blocking 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 $T_L = 90^\circ C$	$I_{F(AV)}$	5.0										A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	120.0										A
Maximum Forward Voltage at 5.0A DC	$V_F$	0.45	0.55	0.70	0.85			0.95				V
Maximum DC Reverse Current @ $T_A = 25^\circ C$ at rated DC blocking voltage @ $T_A = 100^\circ C$	$I_R$	0.5			40.0			0.1			10.0	mA
Typical Junction Capacitance (Note 1)	$C_J$	500			112						pF	
Typical Thermal Resistance (Note 2)	$R_{(JA)}$	40										$^\circ C/W$
Storage Temperature	$T_{STG}$	-55 to +150										$^\circ C$
Operation Junction Temperature	$T_J$	-55 to +125			-55 to +150						$^\circ C$	

#### Note:

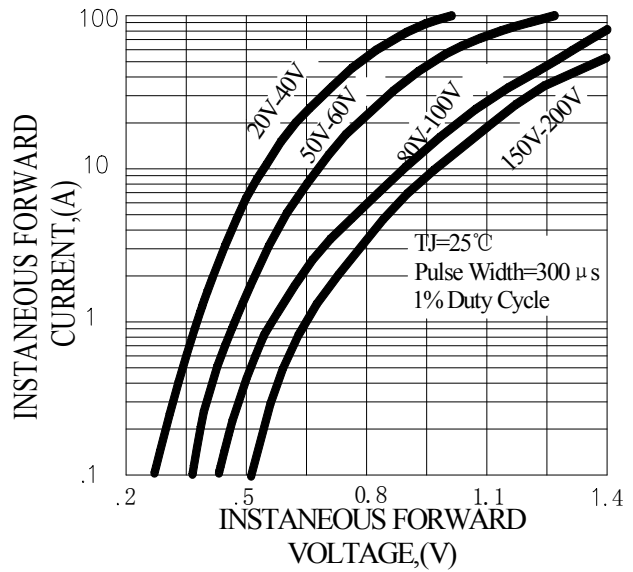
1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) lead length, vertical P.C.Board Mounted.

**RATING AND CHARACTERISTIC CURVES (SR520/SB520 THRU SR5200/SB5200)**

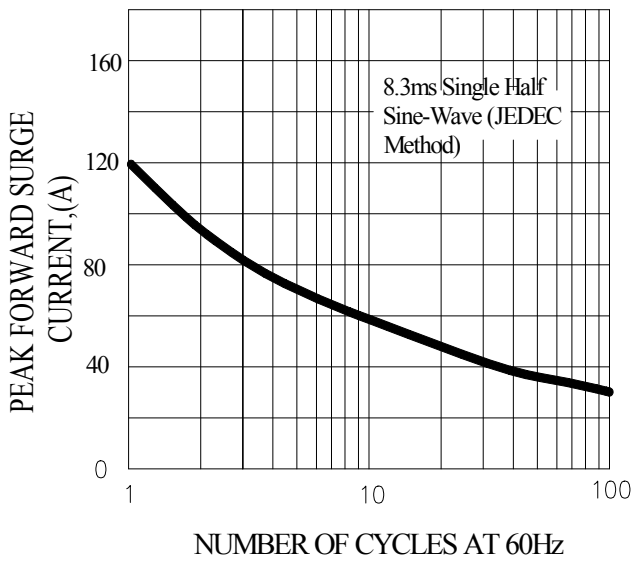
**FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE**



**FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG.4-TYPICAL REVERSE CHARACTERISTICS**

