PINGWEI ENTERPRISE

SB520 THRU SB5200

5.0AMP. SCHOTTKY BARRIER RECTIFIERS

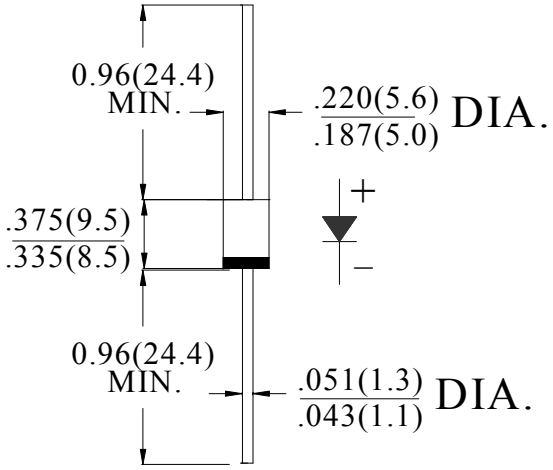
FEATURE

- High current capability,
- Low forward voltage drop
- Low power loss, high efficiency
- High surge capability
- High temperature soldering guaranteed 260°C /1 0sec/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

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

Type Number	SYMBOL	SB 520	SB 530	SB 540	SB 550	SB 560	SB 580	SB 590	SB 5100	SB 5150	SB 5200	units
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 3/8" lead length at T_L =90°C	$I_{F(AV)}$	5.0										A
Peak Forward Surge Current 8.3ms singlehalf sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	150										A
Maximum Forward Voltage at 5.0A DC	V_F	0.55			0.70		0.85			0.95		V
Maximum DC Reverse Current@T_A=25°C	I_R	0.5					0.1					mA
at rated DC blocking voltage @T_A =100°C		5.0					3.0					mA
Typical Junction Capacitance(Note1)	C_J	500					112					pF
Typical Thermal Resistance(Note2)	$R_{(JA)}$	40										°C /W
Storage Temperature	T_{STG}	-55 to +150										°C
Operating Junction Temperature	T_J	-55 to +150										°C

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Ambient at 0.5" lead length, vertical P.C. Board Mounted

RATING AND CHARACTERISTIC CURVES (SB520 THRU SB5200)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

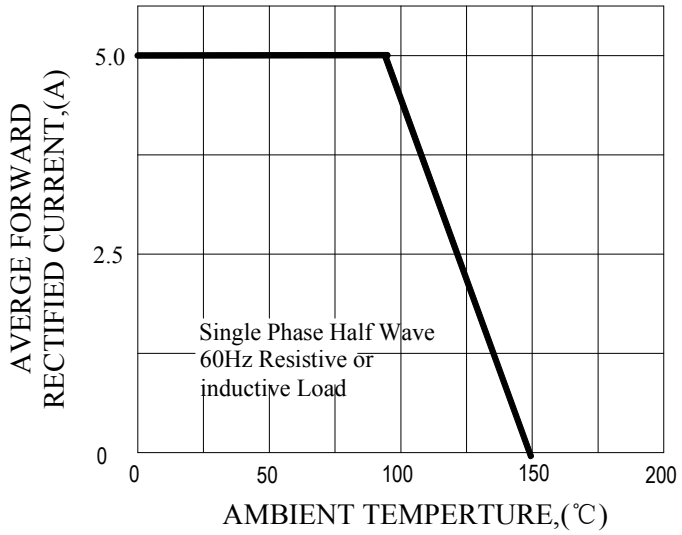


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

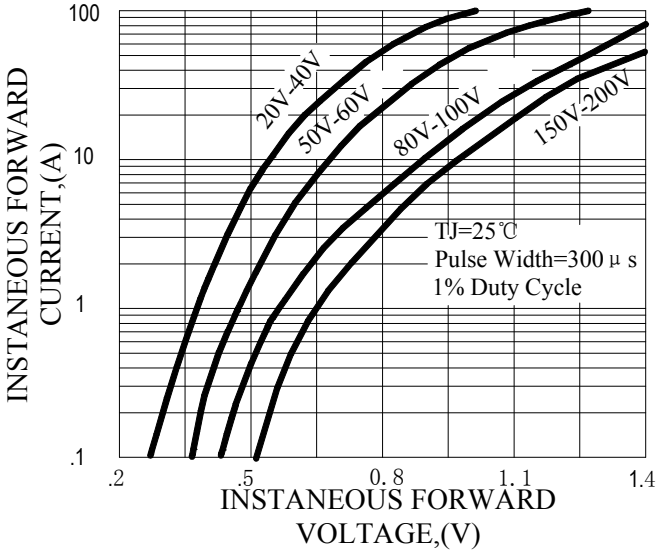


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

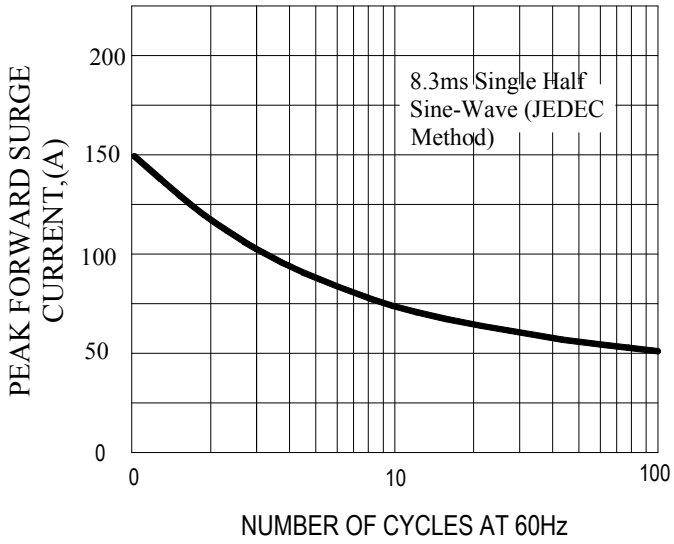


FIG.4-TYPICAL REVERSE CHARACTERISTICS