



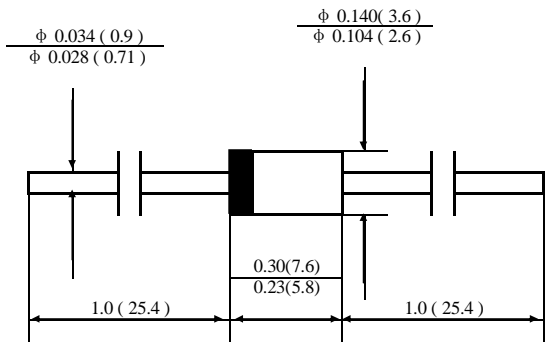
# TIGER ELECTRONIC CO.,LTD

## SB220 THRU SB260

1.5AMP PLASTIC SILICON RECTIFIERS

VOLTAGE RANGE: 20 to 60 VOLTS

DO-15



inch ( mm )

### FEATURES

- . Low cost
- . Diffused junction
- . Low Leakage
- . Low forward voltage drop
- . High current capability
- . Easily cleaned with Freon. Alcohol. Isopropanol and similar solvents
- . The plastic material carries U/L recognition 94V-0

### MECHANICAL DATA

- . Case: JEDEC DO-15. molded plastic
- . Terminals: Axial leads. Solderable per MIL - STD - 202. Method 208
- . Polarity: Color band denotes cathode
- . Weight: 0.072 ounce. 2.05 grams
- . Mounting position: Any

### 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%

	SYMBOL	SB220	SB230	SB240	SB250	SB260	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	V
Maximum Average Forward Rectified Current 9.5mm Lead Length. $T_A = 75^\circ C$	$I_{(AV)}$	2.0					A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load	$I_{FSM}$	60.0					A
Maximum Forward Voltage at 1.5A DC	$V_F$	0.55			0.70 0.65		V
Maximum Reverse Current $T_j = 25^\circ C$ at Rated DC Blocking Voltage $T_j = 100^\circ C$	$I_R$	0.5			15.0		mA
Typical Junction Capacitance ( Note 1 )	$C_j$	150					pF
Typical Thermal Resistance ( Note 2 )	$R_{QJA}$	20					°C/W
Operating Junction Temperature Range	$T_j$	— 55 to 125					°C
Storage Temperature Range	$T_{STG}$	— 55 to 150					°C

- NOTE:**
1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC
  2. Thermal resistance junction to Ambient at 9.5mm lead length,P.C.B.mounted



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Fig.1-Forward Current Derating Curve

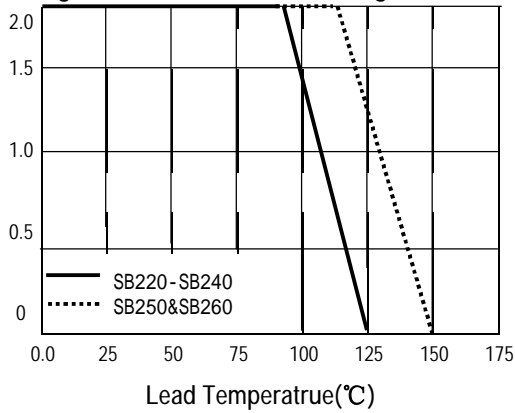


Fig.2-Maximum Non-repetitive Surge Current

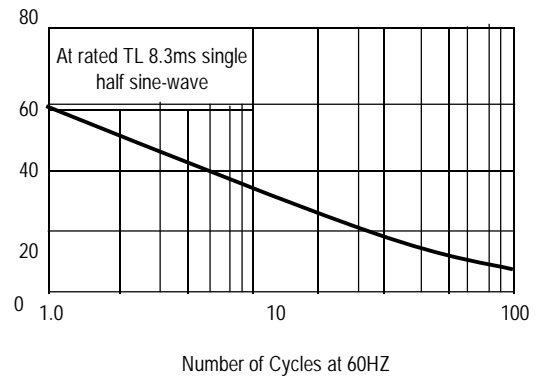


FIG. 3 -- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

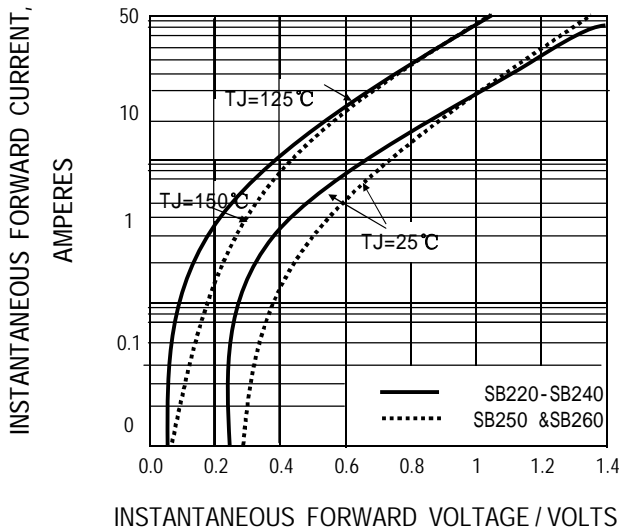


FIG. 4 -- TYPICAL REVERSE CHARACTERISTICS

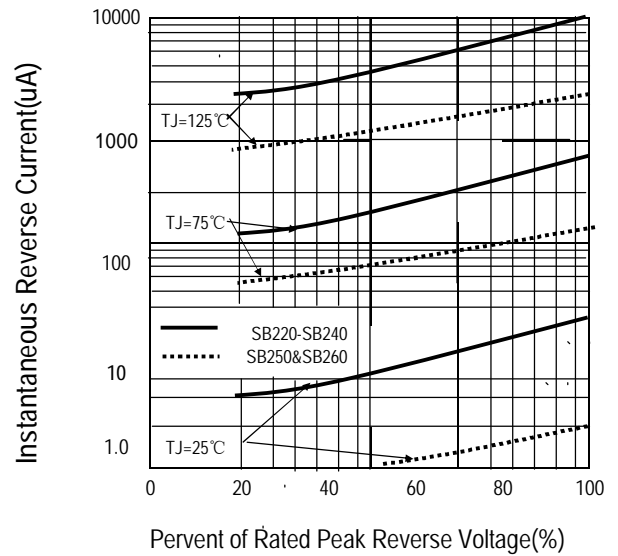


FIG. 5 -- Typical Junction Capacitance

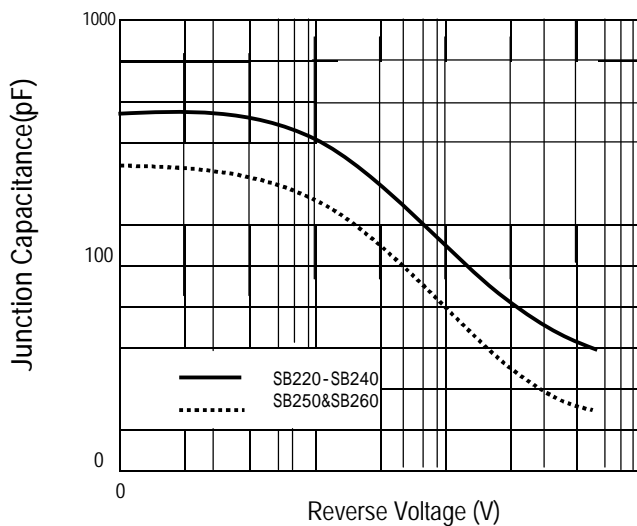


FIG. 6 -- Typical Transient Thermal Impedance

