# SB240 2.0AMPS. SCHOTTKY BARRIER RECTIFIERS

### **FEATURE**

- . High current capability
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High surge capability
- . High temperature soldering guaranteed  $260^{\circ}\text{C}$  /1 0sec/0.375" lead length at 5 lbs tension

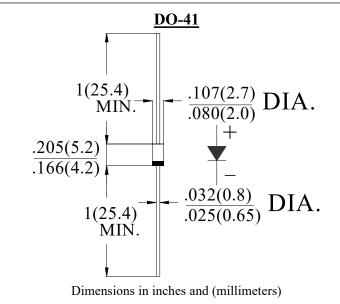
#### **MECHANICAL DATA**

. 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



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at  $25\,^{\circ}$ C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

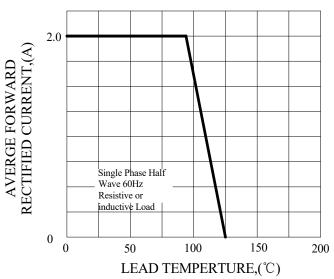
Type Number	SYM BOL	SB240	units
Maximum Recurrent Peak Reverse Voltage	$V_{ m RRM}$	40	V
Maximum RMS Voltage	$V_{ m RMS}$	28	V
Maximum DC blocking Voltage	$V_{ m DC}$	40	V
Maximum Average Forward Rectified Current .3/8"(9.5mm) lead length	$I_{\mathrm{F(AV)}}$	2.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{ m FSM}$	50.0	A
Maximum Forward Voltage at 2.0A DC	$V_{ m F}$	0.55	V
Maximum DC Reverse Current @T <sub>J</sub> =25°C at rated DC blocking voltage @T <sub>j</sub> =100°C	$I_{\mathrm{R}}$	0.2 10.0	mA
Typical Junction Capacitance (Note1)	$C_{ m J}$	85	pF
Typical Thermal Resistance (Note2)	$R_{(\mathrm{JA})}$	70	°C/W
Storage Temperature	$T_{\rm STG}$	-55 to +150	°C
Operating Junction Temperature	$T_{ m J}$	-55 to +125	°C

#### Note:

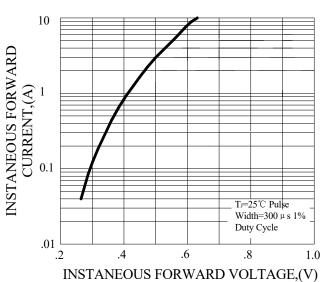
- 1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- 2. Thermal Resistance from Junction to Ambient at 0.375"(9.5mm) lead length

### RATING AND CHARACTERISTIC CURVES





# FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



# FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

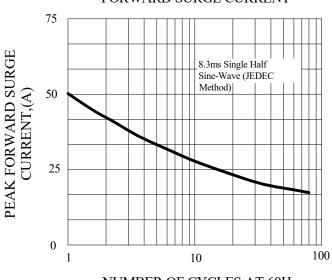
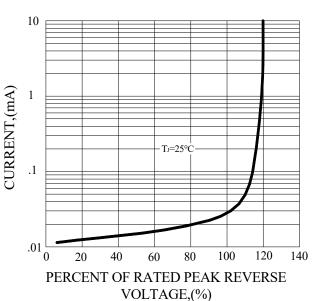


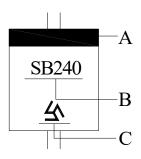
FIG.4-TYPICAL REVERSE CHARACTERISTICS



INSTANEOUS REVERSE

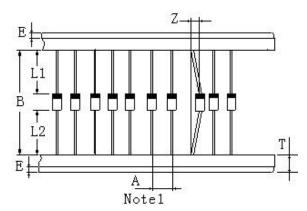
## Marking and packaging illustration

## 1. Marking



SYMBOL	Explanation
A	Color Band Denotes Cathode
В	Product Name
C	Trademark

### 2. Packaging



ITEM	SYMBOL	SPECIFICATIONS	SPECIFICATIONS
		(mm)	(inch)
Component alignment	Z	1.2max	0.048max
Tape width	T	6.0±0.4	0.2±0.016
Exposed adhesive	Е	0.8max	0.032max
Body eccentricity	L1-L2	1.0max	0.040max
Component	A	5.0±0.5	0.2±0.02
Inner tap	В	52.0~53.5	2.06~2.11

NOTE:

Each component lead shall be sandwiched between tapes for a minimum of 2.5mm (0.1inch)