SB260A-E-41C

SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 60V **CURRENT: 2.0A**

FEATURE

High current capability, Low forward voltage drop
Low power loss, high efficiency
High surge capability
High temperature soldering guaranteed
250°C /10sec/0.375" lead length at 5 lbs tension
Halogen Free

MECHANICAL DATA

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

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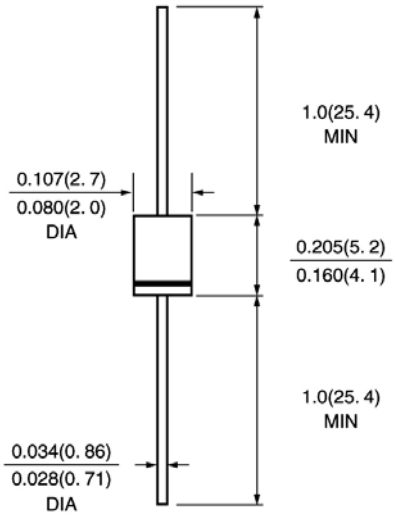


Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	SB260A-E-41C	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	60	V
Maximum RMS Voltage	Vrms	42	V
Maximum DC blocking Voltage	Vdc	60	V
Maximum Average Forward Rectified Current 0.375" lead length	If(av)	2.0@ TL=75℃ 0.5@ Tc=120℃	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	50	A
Inrush Current with 10Ω and 20uF foil capacitor placed in series to the DUT 10000 times, 10s between each pulse Tc=120℃	Ifsm-1	50min	A
Maximum Forward Voltage at 2.0A DC (Note 1)	Vf	0.7	V
Maximum DC Reverse Current Tc =25℃ at rated DC blocking voltage Tc =100℃ Tc =120℃	Ir	0.5 3.0 8.0	mA
Total power dissipatio (Note2)	Ptot	1400	mW
Maximum Reverse Recovery Time(Note 3) Tc =25℃ Tc =120℃	Trr	7 9	nS
Typical Thermal Resistance (Note 4) (Note 5)	Rth(ja) Rth(jc)	50 30	℃ /W
Storage and Operating Junction Temperature	Tstg, Tj	-55 to +150	℃

Note:

1. Pulse test : 300uS pulse width ,1% duty cycle.
2. Tc=25℃(according to calculations)
3. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
4. Thermal Resistance from Junction to Ambient at 0.5" lead length, vertical P.C. Board Mounted
5. Thermal Resistance from Junction to Case

RATINGS AND CHARACTERISTIC CURVES SB260A-E-41C

Fig. 1 - Forward Current Derating Curve

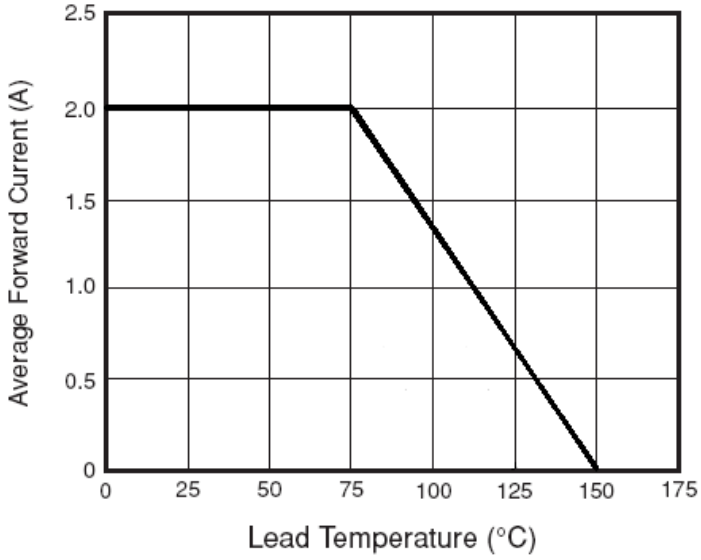


Fig. 2 - Maximum Non-repetitive Surge Current

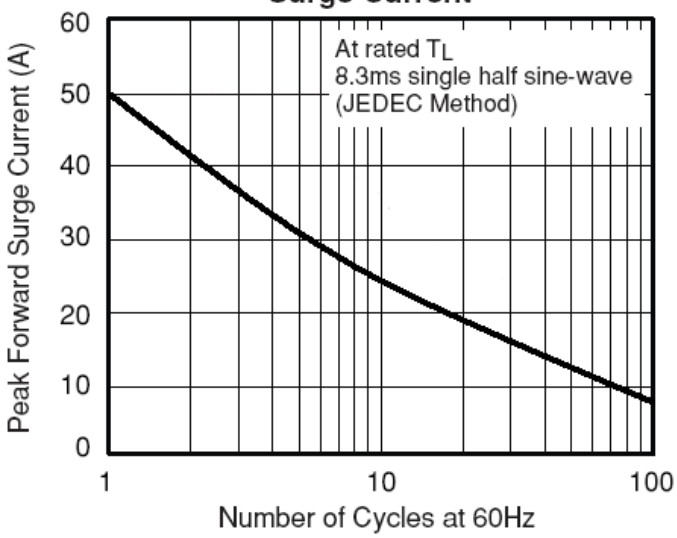


Fig. 3 - Typical Instantaneous Forward Characteristics

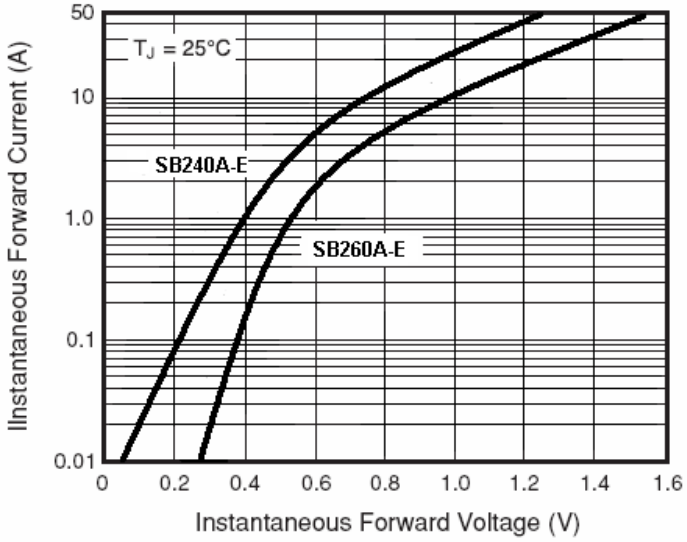


Fig. 4 - Typical Reverse Characteristics

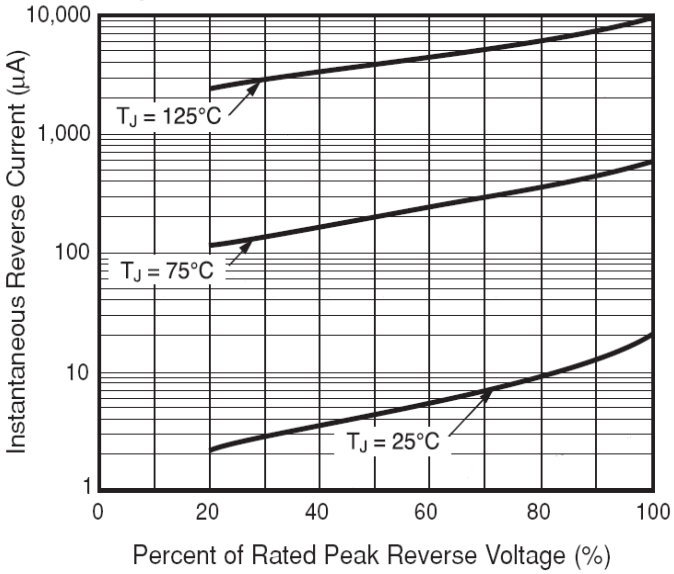
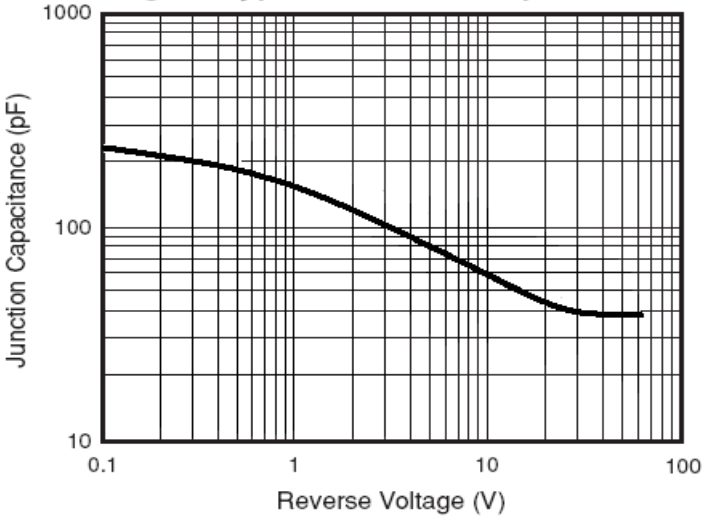


Fig. 5 - Typical Junction Capacitance



ESD CAPABILITY

1. **According to 1.4601.442-01 test circuit, ESD Test of SB260A-E at 60 Vdc passed with the immunity capability of ±15KV**

2. Description of test method & conditions

Setup:

Test voltages for DUT: max specified DC blocking voltage.

ESD test level for Contact discharge:

10 Impulses at each test level and output polarity.

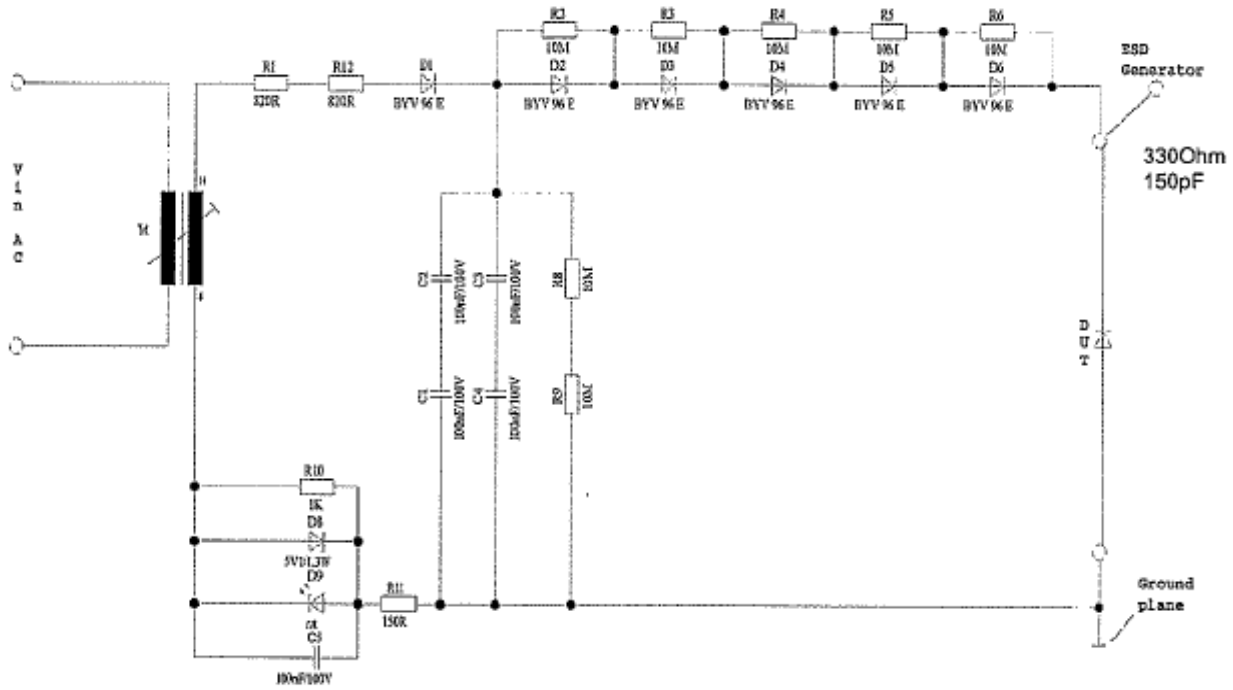
Test level:±2,±4,±6,±8,±10,±12,±15KV

Test criteria:No faults are allowed.

Ambient temperature: 25℃ Relative humidity : 55%

Specification: ESD Generator according to IEC 61000-4-2

Test circuit:



(1.4601.442-01)