PANJIT SEMICONDUCTOR

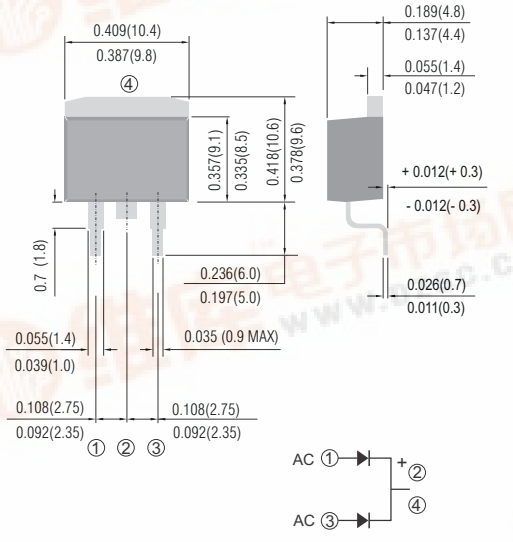
DATA SHEET

SB1020DC~SB10100DC

D²PAK SURFACT SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 100 Volts CURRENT - 10 Ampere

TO-263 / D²PAK Unit: inch (mm)



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency.
- Low forwrd voltge, high current capability
- High surge capacity.
- For use in low voltage,high frequency inverters free wheeling , and polarlity protection applications.

MECHANICAL DATA

Case: D²PAK/TO-263 molded plastic package

Terminals: Lead solderable per MIL-STD-202, Method 208

Polarity: As marked.

Mounting Position: Any

Weight: 0.06 ounces, 1.7grams.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

	SB1020DC	SB1030DC	SB1040DC	SB1050DC	SB1060DC	SB1080DC	SB10100DC	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	100	V
Maximum RMS Voltage	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current at Tc=100°C	10.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150							A
Maximum Forward Voltage at 5.0A per element	0.55			0.75		0.85		V
Maximum DC Reverse Current at Tc=25°C DC Blocking Voltage per element Tc=100°C	0.5 50							mA
Typical Thermal Resistance Note RθJA	60							°C/W
Operating and Storage Temperature Range	-50 to +125							°C

NOTES:

1. Thermal Resistance Junction to Ambient .

RATING AND CHARACTERISTIC CURVES

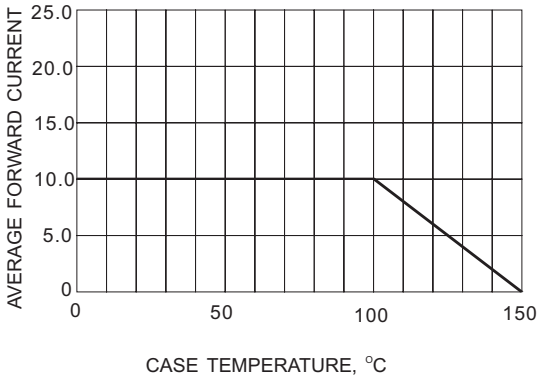


Fig.1- FORWARD CURRENT DERATING CURVE

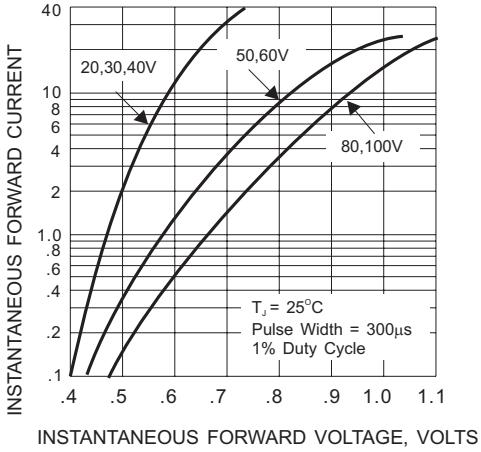


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

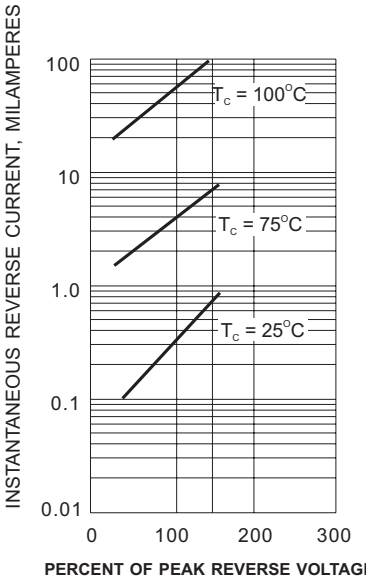


Fig.3- TYPICAL REVERSE CHARACTERISTIC

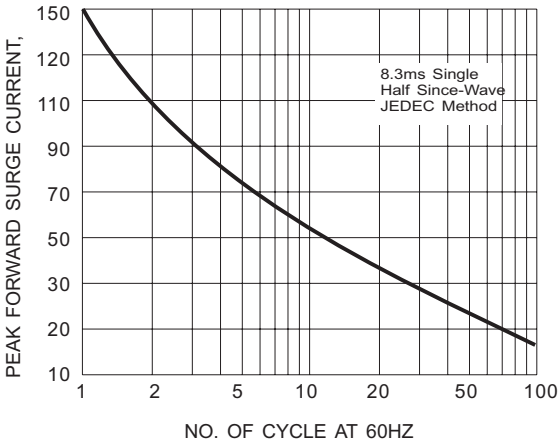


Fig.4- MAXIMUM NON-REPETITIVE SURGE CURRENT

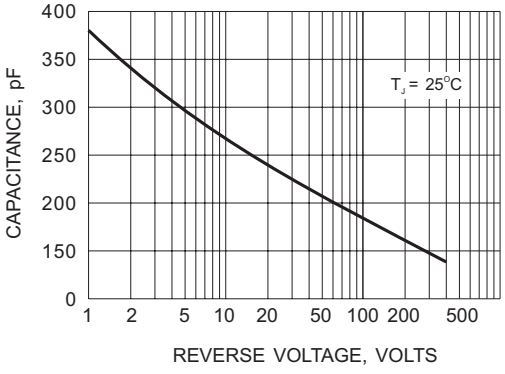


Fig.5- TYPICAL JUNCTION CAPACITANCE