



DATA SHEET

SB820DC~SB8150DC

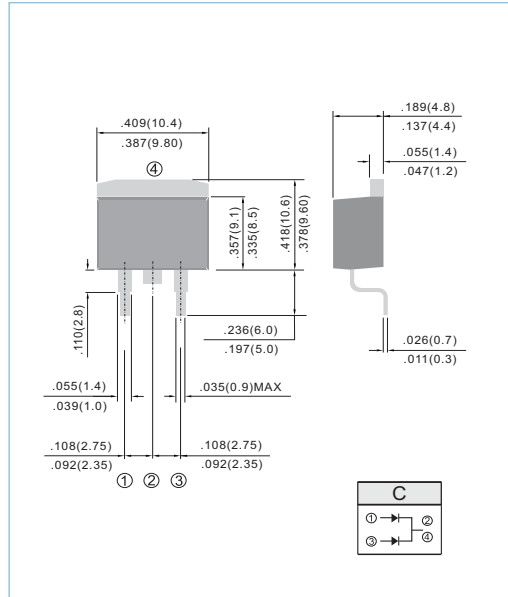
D²PAK SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 150 Volts **CURRENT** 8 Amperes

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 forward voltage, high current capability
- High surge capacity.
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request



MECHANICAL DATA

Case: D²PAK/TO-263 molded plastic package
 Terminals: Lead solderable per MIL-STD-202G, Method 208
 Polarity: As marked.
 Mounting Position: Any
 Weight: 0.06 ounces, 1466mg

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%

PARAMETER	SYMBOL	SB820DC	SB830DC	SB840DC	SB850DC	SB860DC	SB880DC	SB100DC	SB150DC	UNITS	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	150	V	
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	105	V	
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	150	V	
Maximum Average Forward Rectified Current at T _c = 100°C	I _{AV}	8.0								A	
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	150								A	
Maximum Forward Voltage at 4.0A per element	V _F	0.55		0.75		0.85		0.92		V	
Maximum DC Reverse Current at T _c =25°C Rated DC Blocking Voltage T _c =100°C	I _R					0.5 100					mA
Typical Thermal Resistance	R _{θJA}					60				°C / W	
Operating Junction and Storage Temperature Range	T _J ,T _{STG}					-50 to +150				C	

NOTES:

1. Ta = Tj (Junction temperature)
2. Thermal Resistance Junction to Case .



RATING AND CHARACTERISTIC CURVES

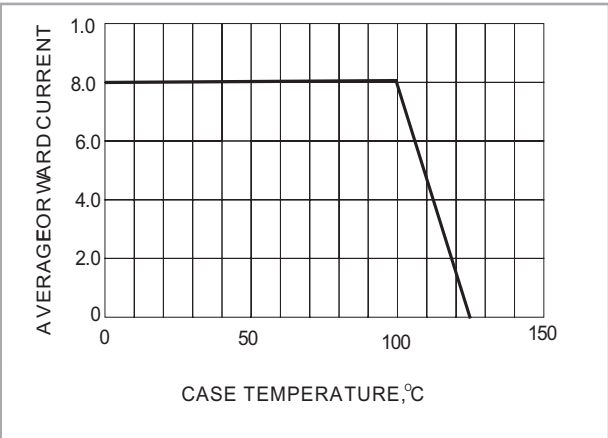


FIG.1-FORWARD CURRENT DERATING CURVE

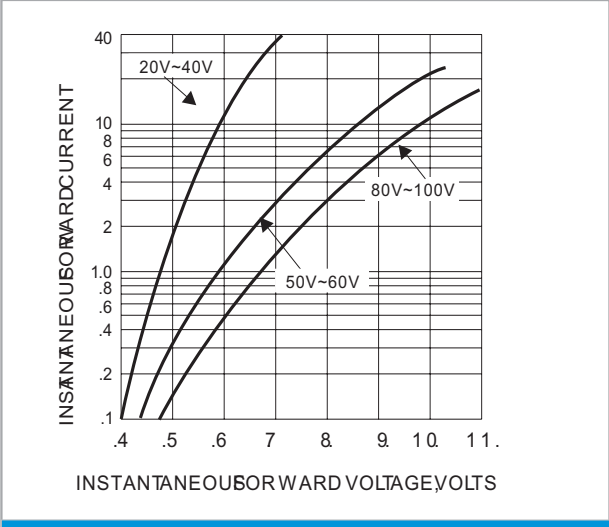


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

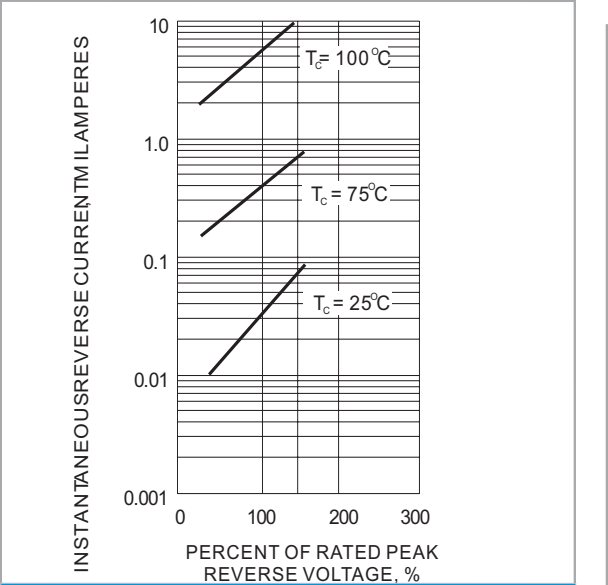


FIG.3-TYPICAL REVERSE CHARACTERISTICS

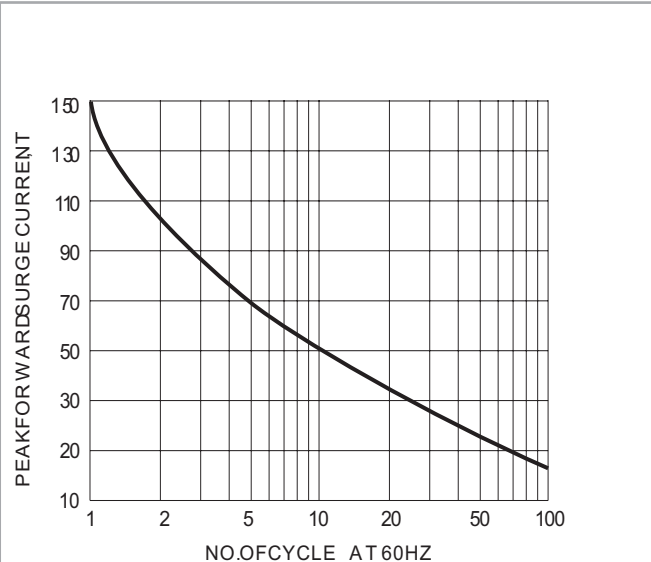


FIG.4-MAXIMUM NON-REPETITIVE SURGE CURRENT

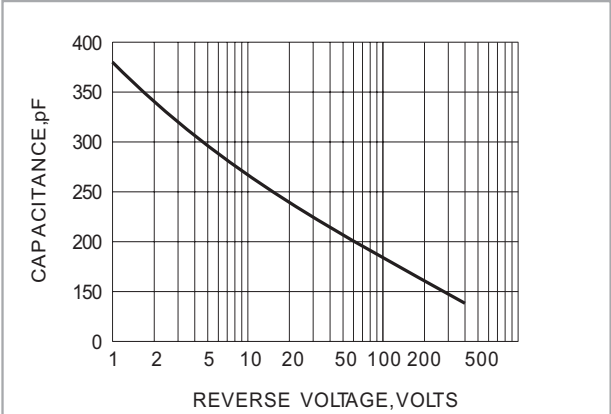


FIG.5-REVERSE VOLTAGE VOLTS