

SCHOTTKY BARRIER RECTIFIERS

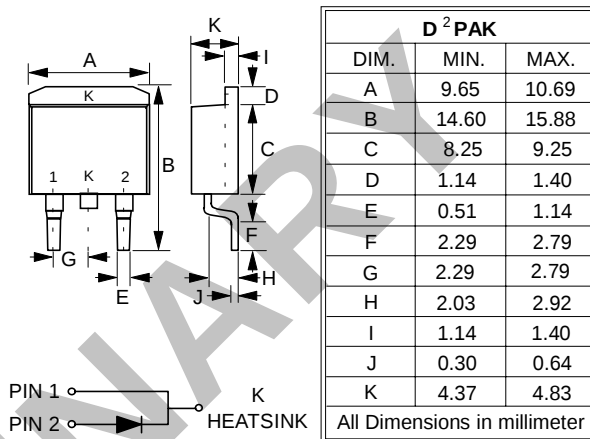
REVERSE VOLTAGE - **25 to 30** Volts
FORWARD CURRENT - **10** Amperes

FEATURES

- Metal of silicon rectifier, majority carrier conduction
- Guard ring for transient protection
- Low power loss, high efficiency
- High current capability, low VF
- High surge capacity
- Plastic package has UL flammability classification 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

MECHANICAL DATA

- Case : D PAK molded plastic
- Polarity : As marked on the body
- Weight : 0.06 ounces, 1.7 grams

D²PAK

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%

CHARACTERISTICS	SYMBOL	SBG1025L	SBG1030L	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	25	30	V
Maximum RMS Voltage	V _{RMS}	17.5	21	V
Maximum DC Blocking Voltage	V _{DC}	25	30	V
Maximum Average Forward Rectified Current (See Fig.1) @ T _C =95°C	I _(AV)	10		A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	I _{FSM}	150		A
Maximum Forward Voltage (Note 1) @ I _F = 10A; T _J =25°C @ I _F = 10A; T _J =125°C	V _F	0.45 0.35		V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ T _J =25°C @ T _J =100°C	I _R	5.0 500		mA
Typical Junction Capacitance (Note 2)	C _J	350		pF
Typical Thermal Resistance (Note 3)	R _{θJC}	2.0		°C/W
Operating Temperature Range	T _J	-55 to +125		°C
Storage Temperature Range	T _{STG}	-55 to +150		°C

NOTES : 1. 300us Pulse Width, 2% Duty Cycle.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal Resistance Junction to Case.

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FIG.1 - FORWARD CURRENT DERATING CURVE

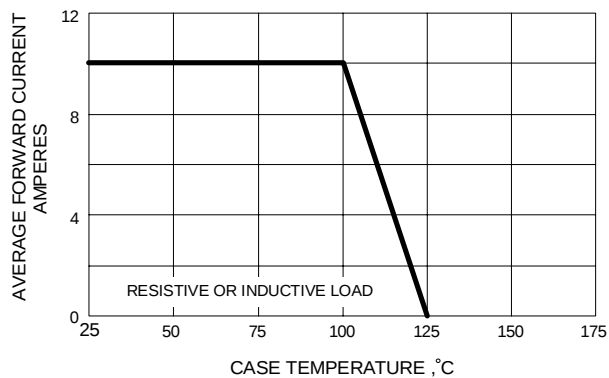


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

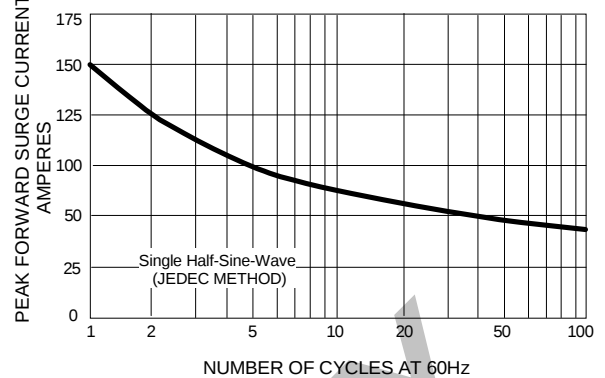


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

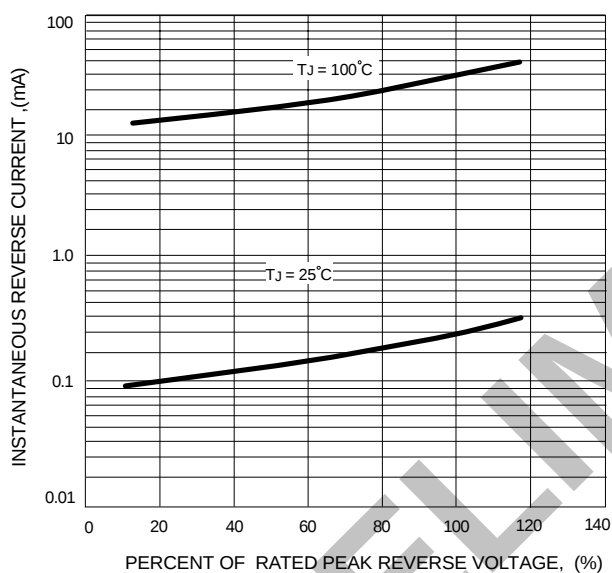


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

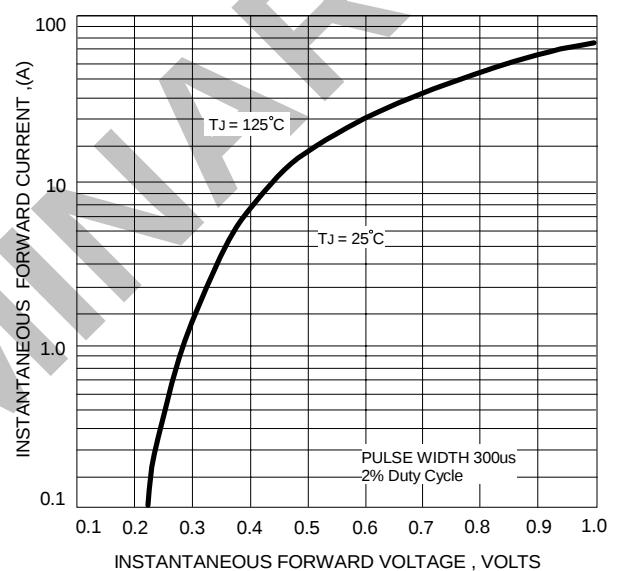


FIG.5 - TYPICAL JUNCTION CAPACITANCE

