



# SB1640LDC

## D<sup>2</sup>PAK SURFACE LOW VF SCHOTTKY BARRIER RECTIFIERS

**VOLTAGE** 40 Volt **CURRENT** 16 Ampere

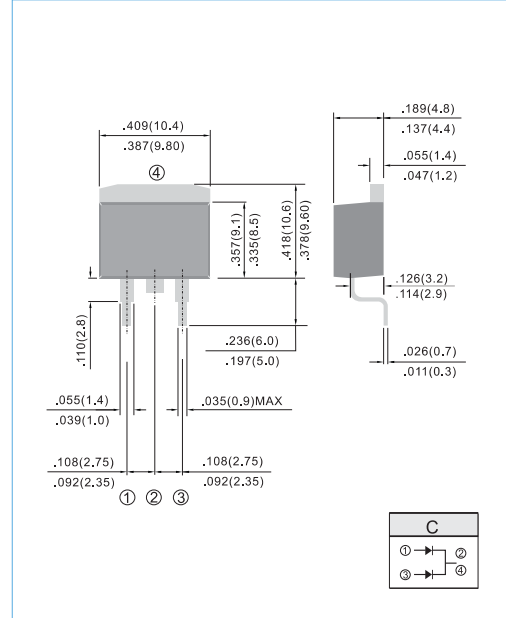
TO-263 / D<sup>2</sup>PAK Unit: inch (mm)

### 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.
- Lead free in compliance with EU RoHS 2011/65/EU directive

### MECHANICAL DATA

- Case: D<sup>2</sup>PAK/TO-263 molded plastic package
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any
- Weight: 0.0514 ounces, 1.46 grams.



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

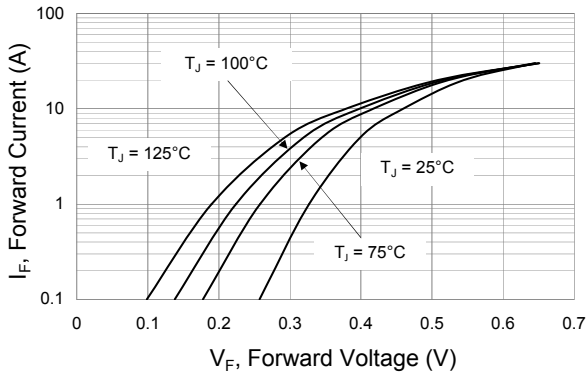
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

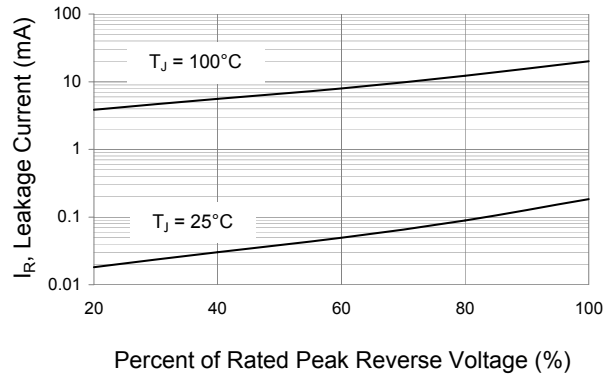
PARAMETER	SYMBOL	SB1640LDC	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	40	V
Maximum RMS Voltage	V <sub>RMS</sub>	28	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	40	V
Maximum Average Forward Current lead length at T <sub>c</sub> = 75°C	I <sub>F(AV)</sub>	16	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	150	A
Maximum Forward Voltage at 8.0A per leg	V <sub>F</sub>	0.46	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.35 50	mA
Typical Thermal Resistance	R <sub>θJC</sub>	2.0	°C / W
Operating Junction Temperature Range	T <sub>J</sub>	-55 to + 200	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to + 150	°C



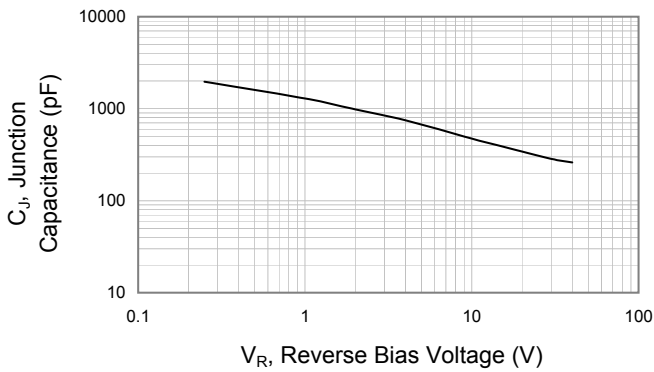
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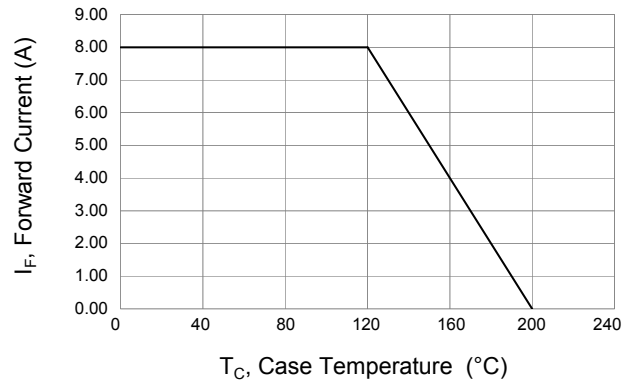
**Fig.1 Typical Forward Characteristics**



**Fig.2 Typical Reverse Characteristics**



**Fig.3 Typical Junction Capacitance**



**Fig.4 Forward Current Derating Curve**



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