

SB1645FCT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 45V

CURRENT: 16.0A

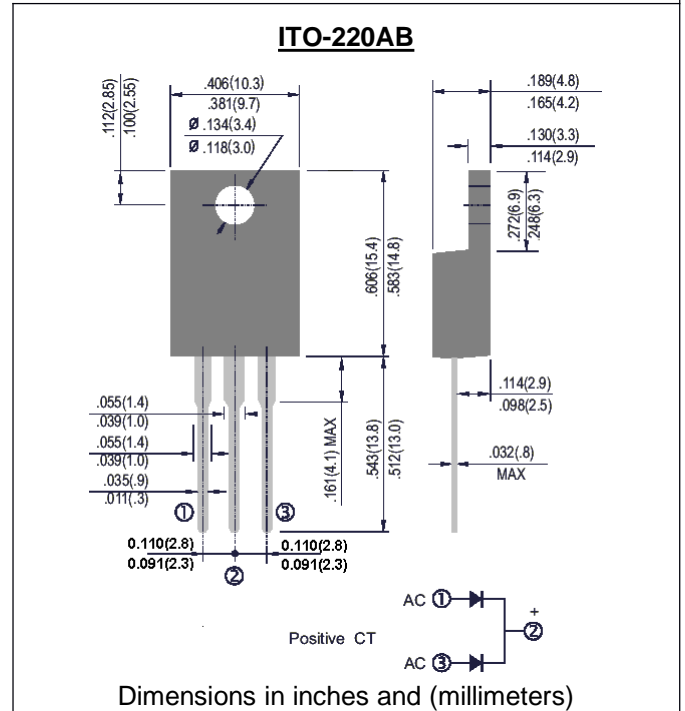


FEATURE

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

MECHANICAL DATA

Case: JEDEC ITO-220 molded plastic body over passivated chip
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	SB1645FCT	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	45	V
Maximum RMS Voltage	V _{rms}	31.5	V
Maximum DC blocking Voltage	V _{dc}	45	V
Maximum Average Forward Rectified Current at T _c =125°C	I _{f(av)}	16	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load per leg	I _{fsm}	150	A
Maximum Forward Voltage per leg and 25°C at 8A	V _f	0.57	V
Maximum Reverse Current per leg at working peak reverse voltage	I _r	0.2 40.0	mA
Typical Thermal Resistance per leg	R _{th(jc)}	4.0	°C/W
Operating Junction Temperature Range	T _j	-65 to +150	°C
Storage Temperature Range	T _{stg}	-65 to +175	°C

Note:

1. Thermal Resistance from Junction to Case

Fig. 1 - Forward Current Derating Curve

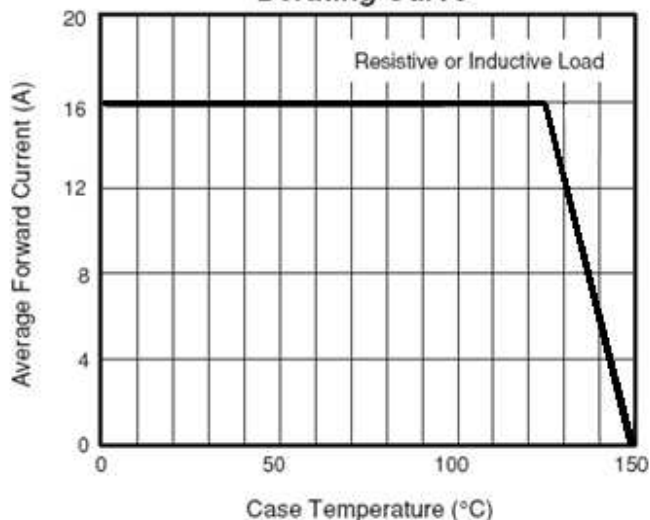


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

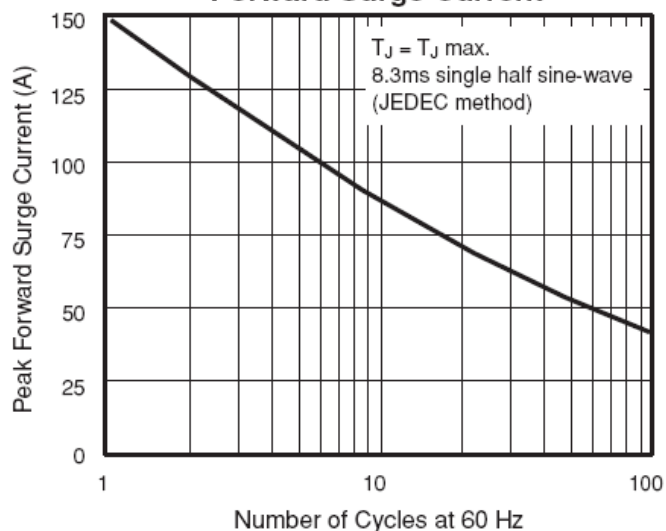


Fig. 3 - Typical Instantaneous Forward Characteristics

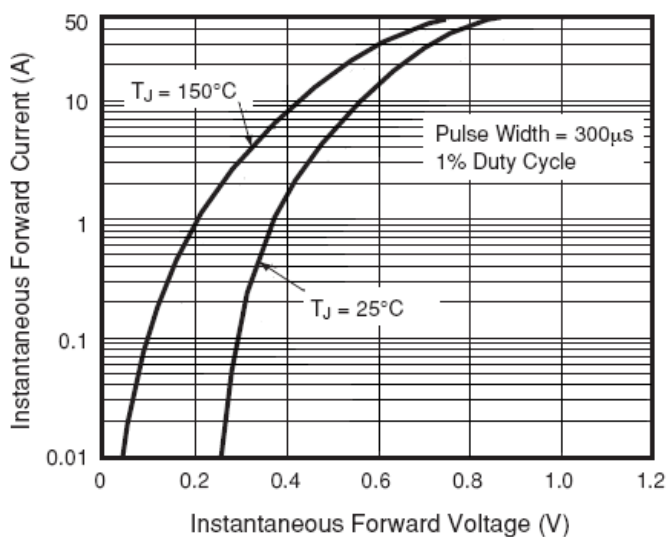


Fig. 4 - Typical Reverse Characteristics

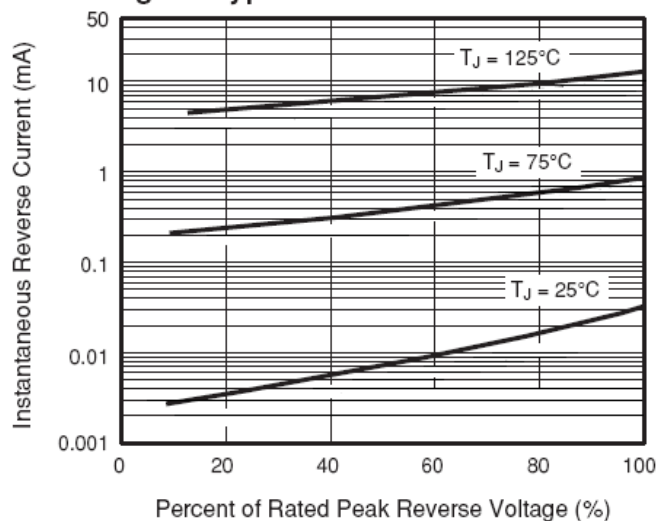


Fig. 5 - Typical Junction Capacitance

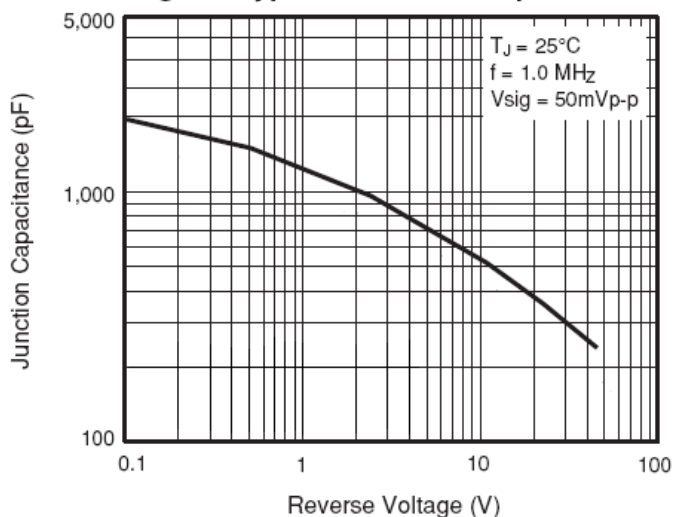


Fig. 6 - Typical Transient Thermal Impedance

