

Features

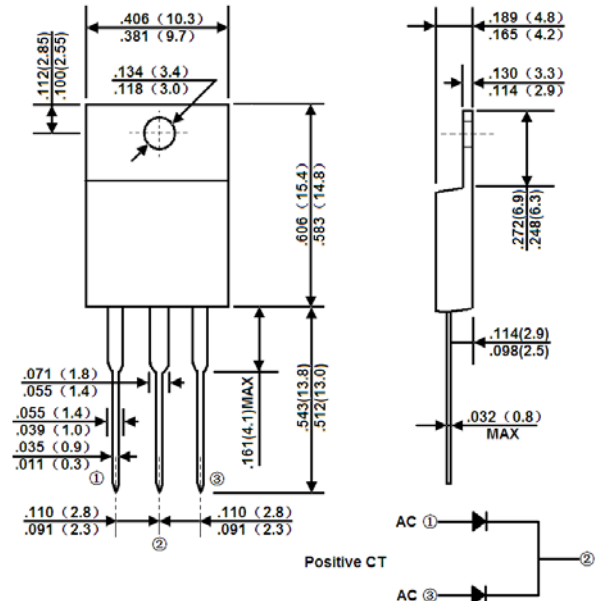
- * For surface mounted application
- * Low power loss, high efficiency
- * High current capability, Low VF
- * High reliability
- * Epitaxial construction
- * Guard-ring for transient protection



RoHS
COMPLIANT

Package Outline Dimensions in inches (millimeters)

ITO-220AB:



Mechanical Data

- * Case: ITO-220AB Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Pure tin plated, lead solderable per MIL-STD-750, Method 2026 guaranteed
- * Polarity: As marked
- * High temperature soldering guaranteed: 260°C/10s .25"(6.35mm) from case
- * Mounting torque: 5 in - 1lbs. Max.

Maximum Ratings and Electrical Characteristics

Rating 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%.

Type Number	Symbol	SB 2020 FCT	SB 2030 FCT	SB 2040 FCT	SB 2050 FCT	SB 2060 FCT	SB 2090 FCT	SB 20100 FCT	SB 20150 FCT	Unit	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	90	100	150	V	
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	63	70	105	V	
Maximum D.C Blocking Voltage	V_{DC}	20	30	40	50	60	90	100	150	V	
Maximum Average Forward Rectified Current	$I_{F(AV)}$	20								A	
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	200								A	
Maximum Instantaneous Forward Voltage (Note 1) $I_F=10A$	V_F	0.55			0.70		0.90		1.0	V	
Maximum reverse current @ rated VR	I_R	$T_A=25^\circ C$	0.5				0.1				mA
		$T_A=100^\circ C$	15				10				
		$T_A=125^\circ C$	-				5				
Typical Junction Capacitance (Note 2)	C_j	440			300		280			pF	
Typical thermal resistance	$R_{\theta JC}$	1.5								°C/W	
Operating junction temperature range	T_J	-55 to +125				-55 to +150					°C
Storage Temperature Range	T_{STG}	-55 to +150									°C

Note: 1、 Pulse test with PW=300 μs, 1% duty cycle 2、 Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

Ratings and Characteristic Curves

FIG. 1 FORWARD CURRENT DERATING CURVE

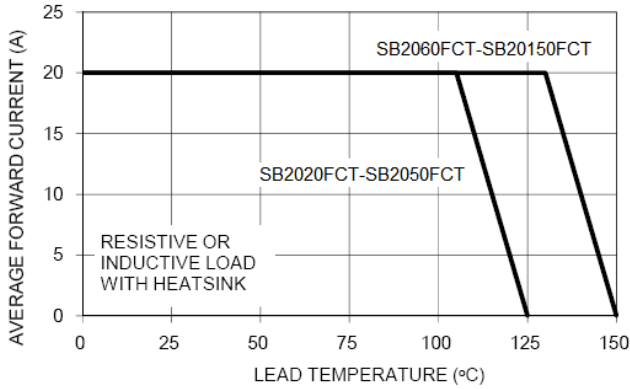


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

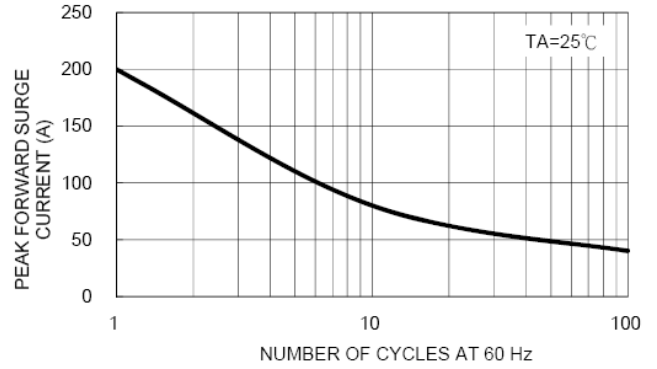


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

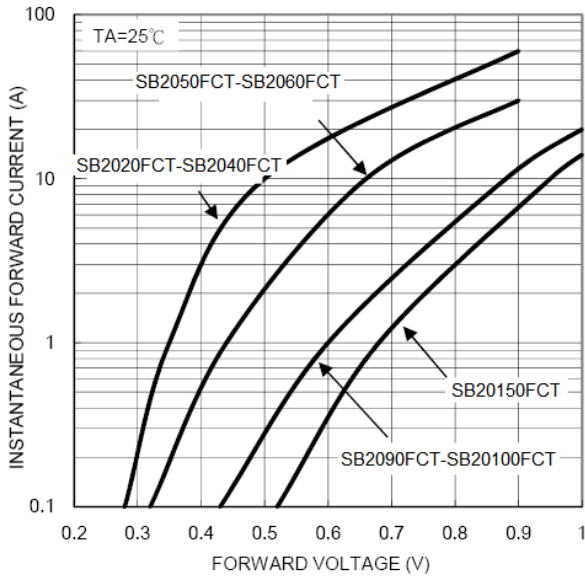


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

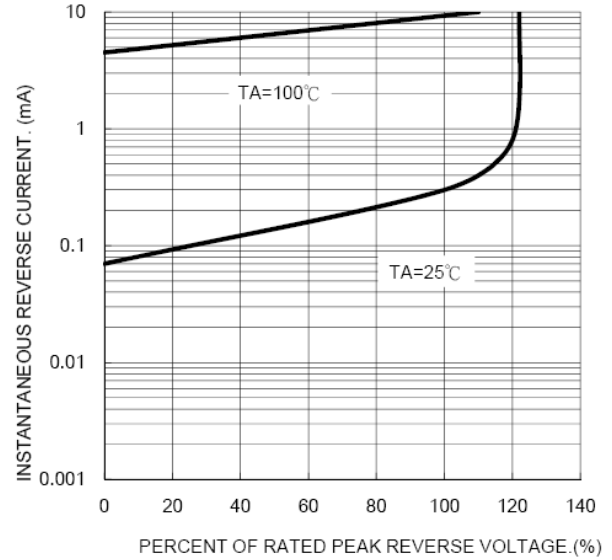


FIG. 5 TYPICAL JUNCTION CAPACITANCE

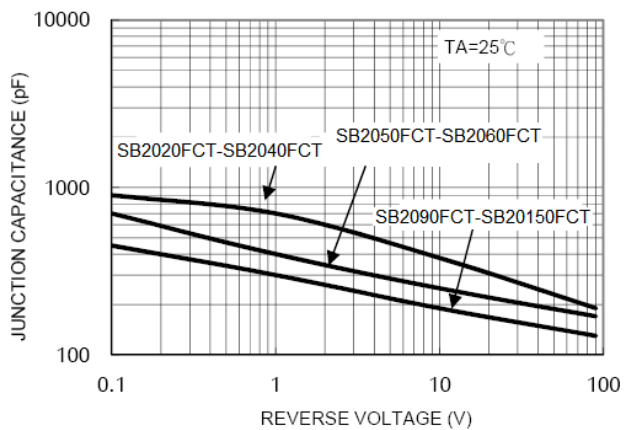
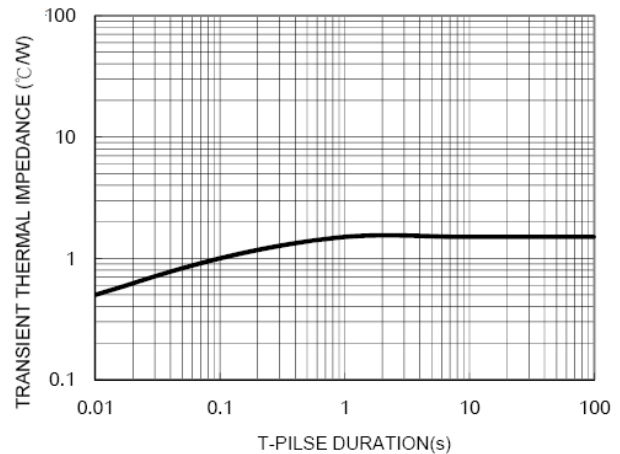


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE





SB2020FCT THRU SB20150FCT

Schottky Barrier Rectifiers

Ordering Information

Part No.	Package	Packing
SB2020FCT~SB20150FCT	ITO-220AB	50pcs/Tube