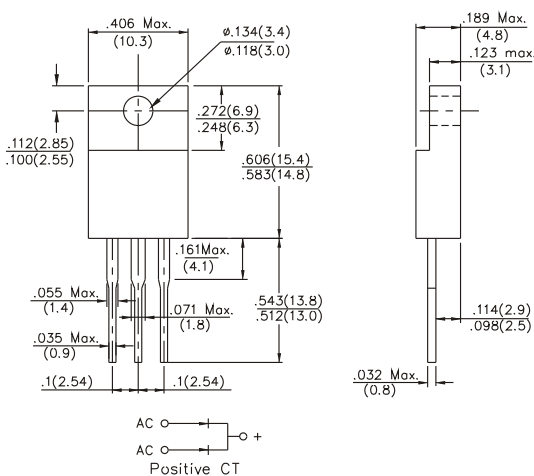
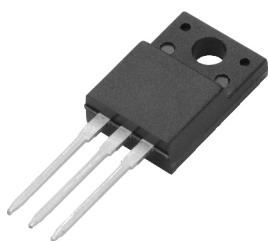


SB4020FCT thru SB40200FCT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE - 20 TO 200 VOLTS CURRENT - 40 AMPERES

ITO-220AB



Dimensions in inches and (millimeters)

FEATURES

- Guard Ring for over voltage Protection
- High forward surge capability
- High frequency operation
- Component in accordance to RoHS 2002/95/EC

MECHANICAL DATA

- Case: ITO220AB
- Case Material: Molded Plastic, UL Flammability Classification Rating 94V-0
- Terminals: Matte Tin Finish annealed over copper Leadframe. Solderable per MIL-STD-202
- Weight: 1.689 grams (approximate)

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%

PARAMETER	SYMBOL	SB	SB	SB	SB	SB	SB	SB	SB	UNIT
		4020FCT	4040FCT	4050FCT	4060FCT	4080FCT	40100FCT	40150FCT	40200FCT	
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	50	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	14	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	V_{DC}	20	40	50	60	80	100	150	200	V
Maximum average forward rectified current (Total)	I_F	40.0								A
(Per Leg)		20.0								
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	250.0								A
Maximum Instantaneous Forward Voltage $I_F=20A @ 25^\circ C$	V_F	0.55	0.70	0.85	0.90	0.95				V
$I_F=20A @ 100^\circ C$		0.50	0.65	0.80	0.85	0.90				
Maximum DC Reverse Current @ $T_c=25^\circ C$ at Rated DC Blocking Voltage @ $T_c=100^\circ C$	I_R	0.5				0.2				mA
		50.0				15.0				
Typical Junction Capacitance	C_j	700	550	450	330	260				pF
Typical Thermal Resistance	$R_{\theta JC}$	3								°C/W
Operating Temperature Range	T_J	-55 to +125								°C
Storage Temperature Range	T_{STG}	-55 to +150								°C

SB4020FCT thru SB40200FCT

SCHOTTKY BARRIER RECTIFIER

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

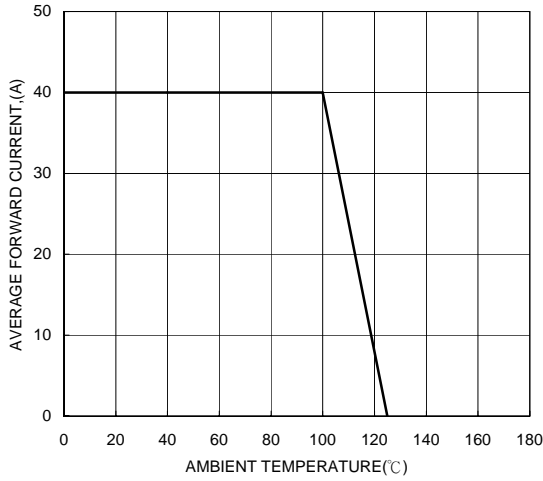


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

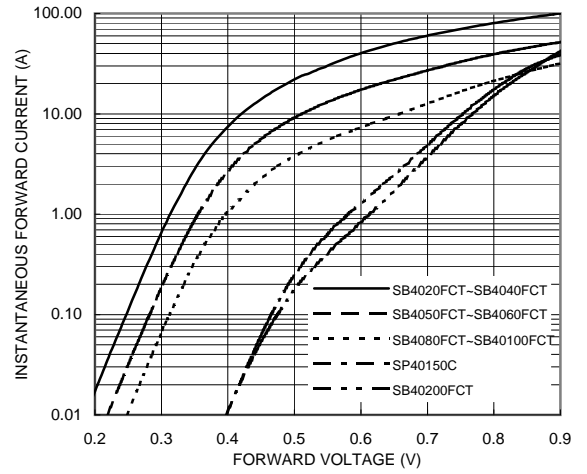


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

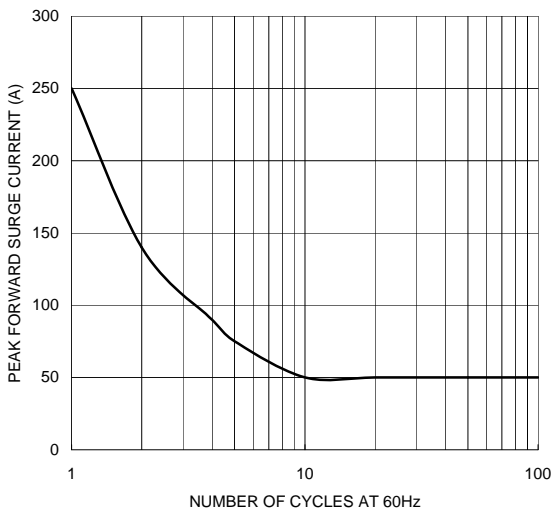


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

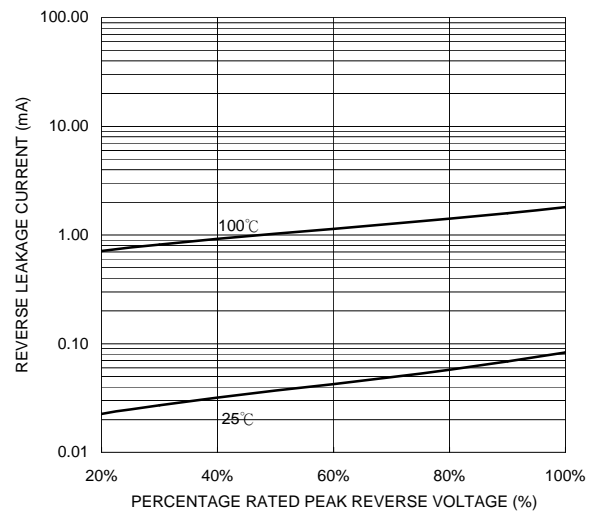


FIG. 5-TYPICAL JUNCTION CAPACITANCE

