

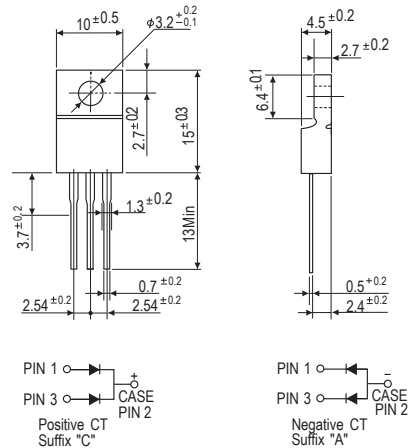
Features

- Plastic Package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss, high efficiency
- High current capability, Low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- Dual rectifier construction
- High temperature soldering guaranteed: 250°C/10 seconds, 0.25" (6.35mm) from case

Mechanical Data

- Case : JEDEC TO-220 molded plastic body
- Terminals : Lead solderable per MIL-STD-750, Method 2026
- Polarity : As marked. No suffix indicates Common Cathode, suffix "A" indicates Common Anode
- Mounting Position : Any
- Weight : 0.08ounce, 2.24 grams

ITO-220



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

(Ratings at 25 °C ambient temperature unless otherwise specified, single phase, half wave, resistive or inductive load. For capacitive load, derate by 20%)

		Symbols	SBP 2020	SBP 2030	SBP 2040	SBP 2050	SBP 2060	SBP 2080	SBP 20100	Units
Maximum repetitive peak reverse voltage		V _{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS voltage		V _{RMS}	14	21	28	35	42	56	70	Volts
Maximum DC blocking voltage		V _{DC}	20	30	40	50	60	80	100	Volts
Maximum average forward rectified current at T _c =105℃		I(AV)	20.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	150.0				125.0			Amps
Maximum instantaneous forward voltage at 10A (Note 1)		V _F	0.60			0.75		0.90		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Note1)	T _A =25℃	I _R	1.0							mA
	T _A =100℃		100.0							
Typical thermal resistance (Note 2)		R _{ΘJC}	3.5							℃/W
Operating junction temperature range		T _J	-50 to +125							℃
Storage temperature range		T _{STG}	-65 to +150							℃

Notes:

- (1) Pulse test: 300μS pulse width, 1% duty cycle
- (2) Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES SBP2020 THRU SBP20100

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

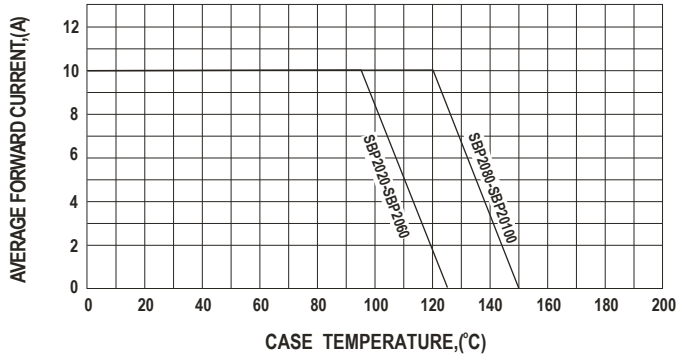


FIG.2-TYPICAL FORWARD CHARACTERISTICS

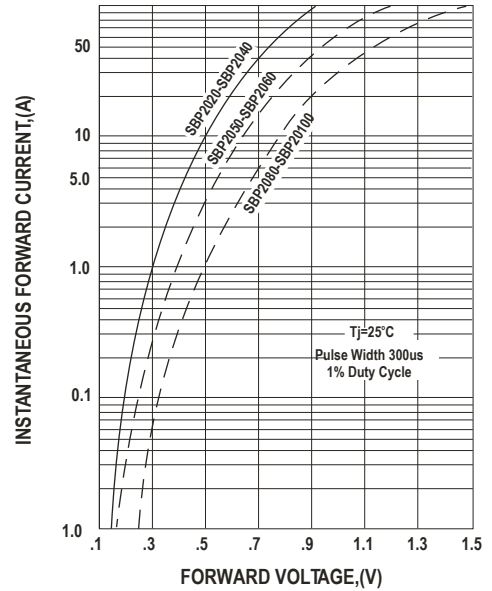


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

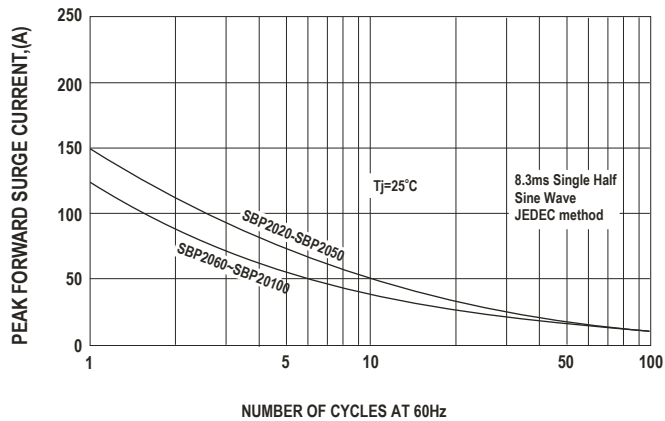


FIG.4-TYPICAL JUNCTION CAPACITANCE

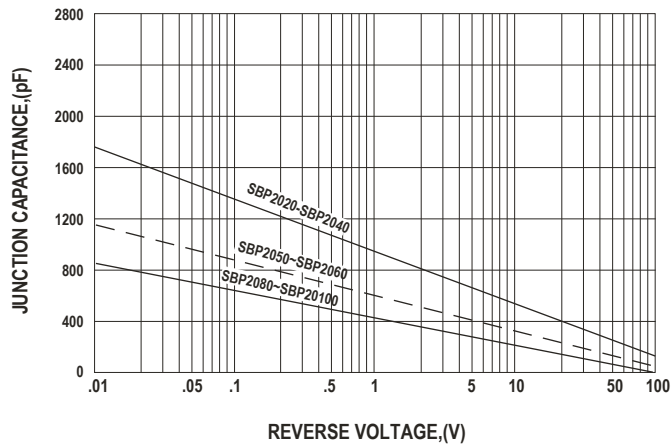


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

