

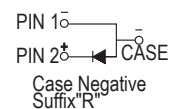
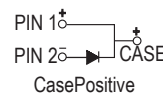
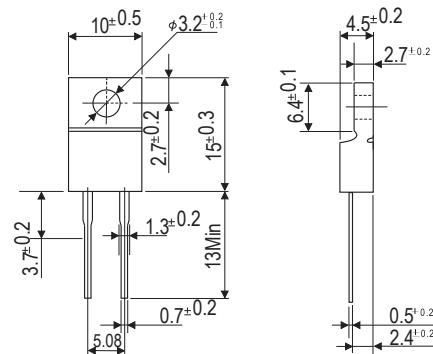
### Features

- 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
- Single rectifier construction
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed : 250°C /10 seconds, 0.25"(6.35mm) from case

### Mechanical Data

- Case : JEDEC ITO-220A molded plastic body
- Terminals : Lead solderable per MIL-STD-750, Method 2026
- Polarity : As marked
- Mounting Position : Any
- Weight : 0.08 ounce, 2.24 gram

### ITO-220A



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	SBP735	SBP745	SBP750	SBP760	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	35	45	50	60	Volts
Maximum RMS voltage	$V_{RMS}$	25	32	35	42	Volts
Maximum DC blocking voltage	$V_{DC}$	35	45	50	60	Volts
Maximum average forward rectified current (see Fig. 1)	$I_{(AV)}$	7.5				Amps
Repetitive peak forward current(square wavr, 20KHZ) at $T_C=105^\circ C$	$I_{FRM}$	15.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	150.0				Amps
Maximum instantaneous forward voltage at 7.5A (Note 1)	$V_F$	0.65		0.75		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Note1)	$T_A=25^\circ C$	1.0				mA
	$T_A=125^\circ C$	15		50		
Typical thermal resistance (Note 2)	$R_{\theta JC}$	5.0				$^\circ C/W$
Operating junction temperature range	$T_J$	-65 to +150				$^\circ C$
Storage temperature range	$T_{STG}$	-65 to +150				$^\circ C$

#### Notes:

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



# RATINGS AND CHARACTERISTIC CURVES SBP735 THRU SBP760

FIG.1-FORWARD CURRENT DERATING CURVE

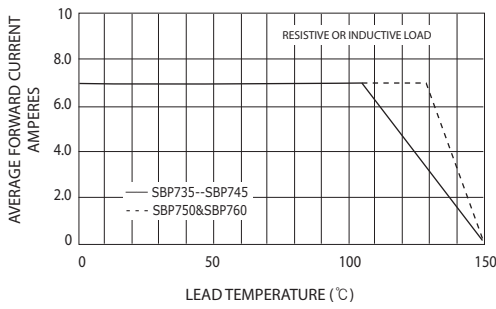


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

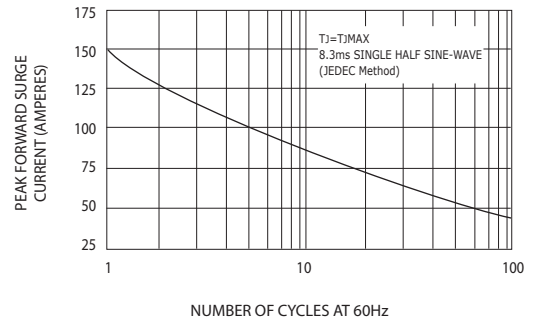


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

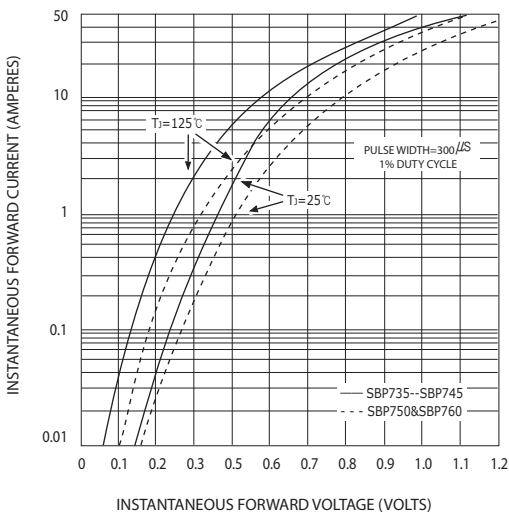


FIG.4-TYPICAL REVERSE CHARACTERISTICS

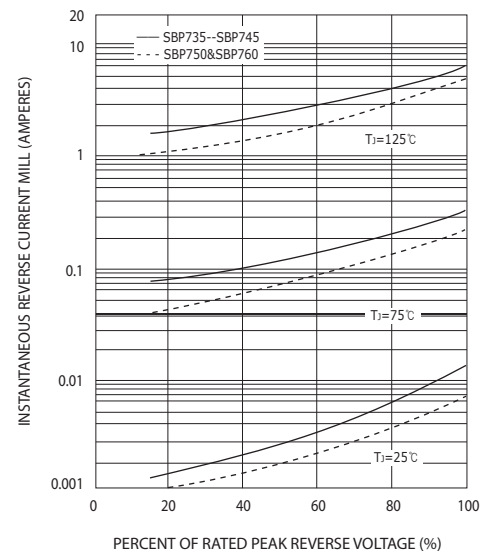


FIG.5-TYPICAL JUNCTION CAPACITANCE

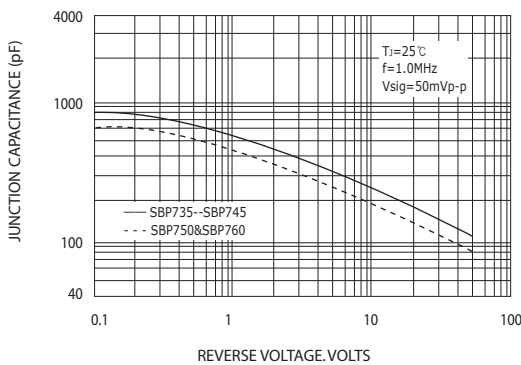


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

