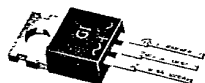


T-23-07

SBP16-T SERIES

HIGH CURRENT SCHOTTKY RECTIFIER

**GENERAL
INSTRUMENT****FEATURES**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal to silicon rectifier, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low V_f
- High surge capacity
- Epitaxial construction
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 250°C/10 seconds/.25", (6.35mm) from case

MECHANICAL DATA

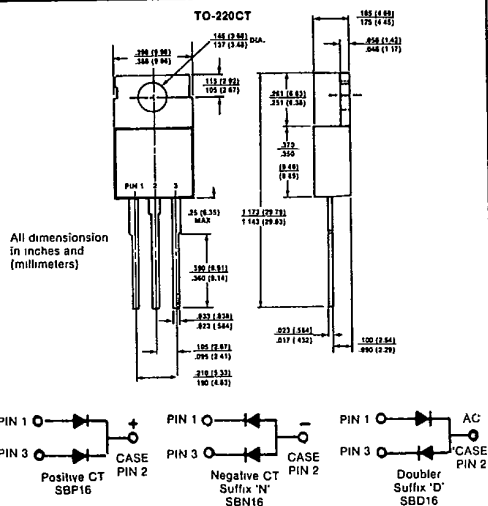
Case: TO-220CT molded plastic
 Terminals: Lead solderable per MIL-STD-202, Method 208
 Polarity: As marked
 Mounting Position: Any
 Weight: .08 ounces, 2.24 grams

VOLTAGE RANGE

20 to 60 Volts

CURRENT

16 Amperes

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.
 Resistive or inductive load.
 For capacitive load, derate current by 20%.

	SBP 1620T	SBP 1630T	SBP 1635T	SBP 1640T	SBP 1645T	SBP 1650T	SBP 1660T	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	35	40	45	50	60	V_{RRM}
Maximum RMS Voltage	14	21	24.5	28	31.5	35	42	V_{RMS}
Maximum DC Blocking Voltage	20	30	35	40	45	50	60	V_{DC}
Maximum Average Forward Rectified Current See Fig. 1	16.0							$A_{(AV)}$
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	150							A_{pk}
Maximum Instantaneous Forward Voltage Per Leg $I_F = 8.0A$, $T_c = 125^\circ C$ (Note 3) $I_F = 8.0A$, $T_c = 25^\circ C$	.55 .65			.65 .75				V_{pk} V_{pk}
Maximum Average Reverse Current at $T_c = 25^\circ C$ Rated DC Blocking Voltage per element $T_c = 100^\circ C$	1.0 50.0							mA mA
Typical Thermal Resistance $R_{\theta JC}$ (Note 1)	3.0							$^\circ C/W$
Typical Junction Capacitance (Note 2)	700			460				pF
Operating Temperature Range, T_c	-65 to +125			-65 to +150				$^\circ C$
Storage Temperature Range, T_{stg}	-65 to +150							$^\circ C$

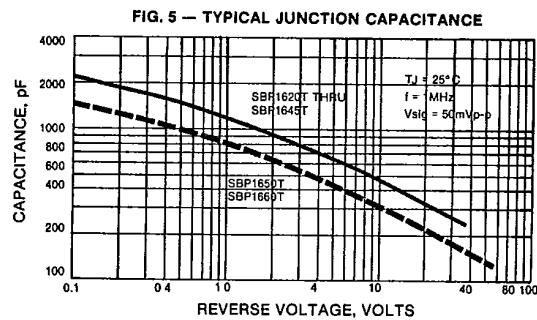
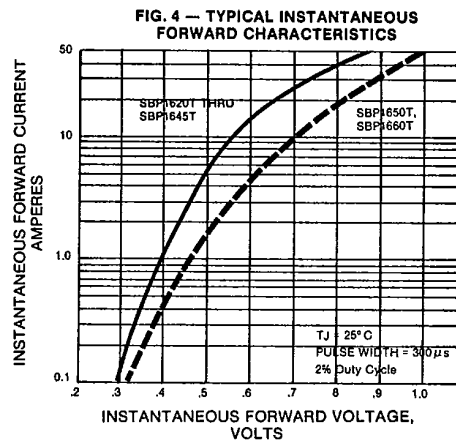
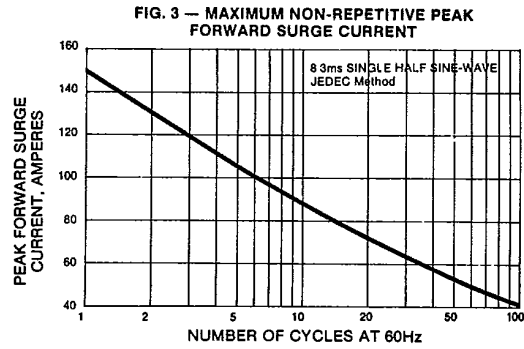
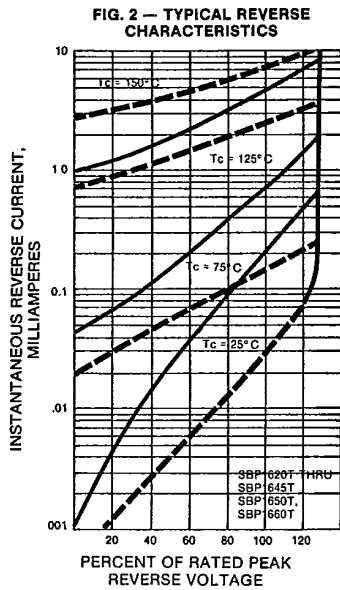
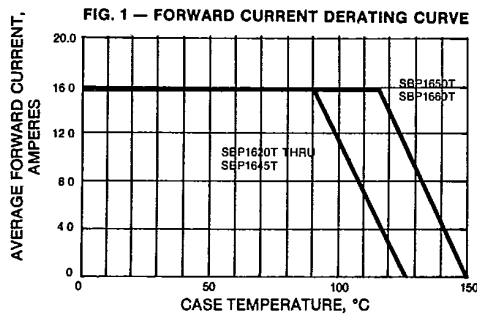
NOTES:

1. Thermal Resistance Junction to CASE.
 2. Measured at 1 MHz and applied reverse voltage of 4.0 volts

3. 300 μs Pulse Width, 2% Duty Factor.

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**RATING AND CHARACTERISTIC CURVES
SBP16-T SERIES**



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