

SB1040LCT

10.0Amp Low VF Schottky Barrier Rectifiers

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C,MAX. for 10 seconds

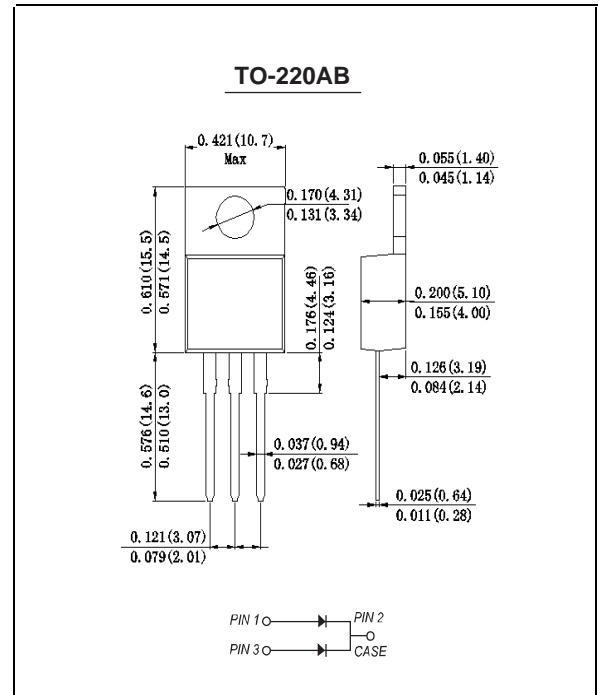
Mechanical Data

Case: TO-220AB molded plastic body

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: As marked

Mounting Position: Any



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 current derate by 20%.

	SYMBOLS	SB1040LCT	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	40	VOLTS
Maximum RMS voltage	V_{RMS}	28	VOLTS
Maximum DC blocking voltage	V_{DC}	40	VOLTS
Maximum average forward rectified current (see fig.1)	$I_{(AV)}$	10.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100.0	Amps
Maximum instantaneous forward voltage at 5.0A	V_F	0.46	Volts
Maximum DC reverse current at rated DC blocking voltage	I_R	0.5 40.0	mA
Typical thermal resistance (NOTE 1)	$R_{\theta JC}$	12	°C/W
Operating junction temperature range	T_J	-55 to +125	°C
Storage temperature range	T_{STG}	-55 to +150	°C

Note:1. Thermal resistance from junction to case

Ratings And Characteristic Curves

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FIG. 1- FORWARD CURRENT DERATING CURVE

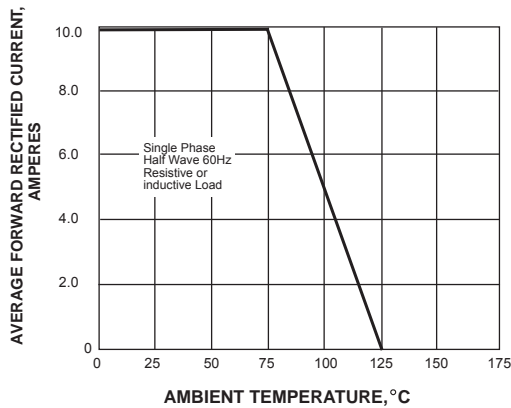


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

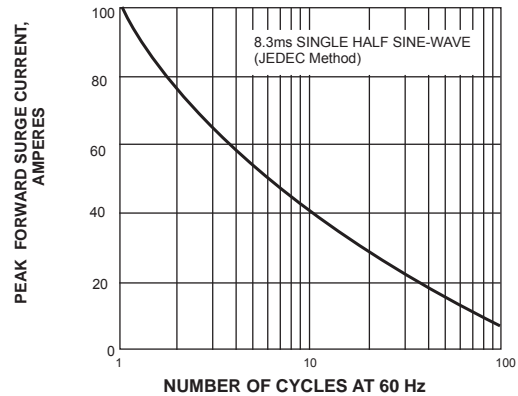


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

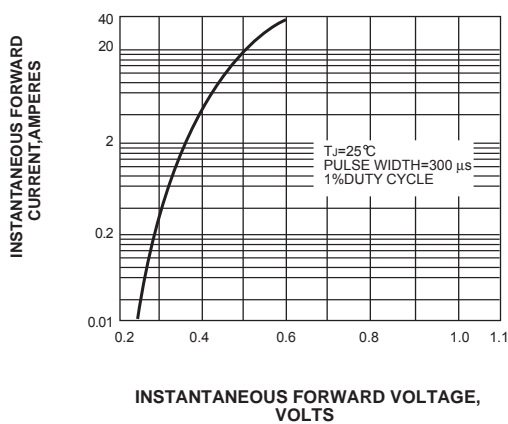


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

