

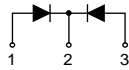
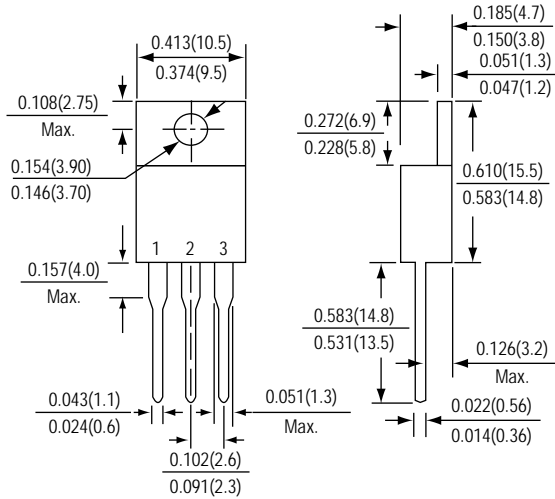


# SBL1040CT THRU SBL1060CT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 40 to 60 Volts

Forward Current - 10 Amperes

## TO-220AB



\*Dimensions in inches and (millimeters)



## FEATURES

- \* Lead free product
- \* Low forward voltage drop
- \* High current capacity
- \* High reliability
- \* High surge current capability
- \* Epitaxial construction
- \* Plastic Material-UL Recognition Flammability Classification 94V-0

## MECHANICAL DATA

**Case :** JEDEC TO-220AB molded plastic body

**Terminals :** Plated Leads, solderable per MIL-STD-750, Method 2026

**Polarity :** Molded on body

**Mounting Position :** Any

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.	SYMBOLS	SBL1040CT	SBL1045CT	SBL1060CT	UNITS
Maximum repetitive peak reverse voltage	VRRM	40	45	60	Volts
Maximum RMS voltage	VRMS	28	31.5	42	Volts
Maximum DC blocking voltage	VDC	40	45	60	Volts
Maximum average forward rectified current at Tc = 75 °C	I (AV)	10			Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	IFSM	150			Amps
Maximum instantaneous forward voltage IF= @ 5 A	VF	0.55		0.70	Volts
Maximum DC reverse current @Tc=25°C at rated DC blocking voltage @Tc=125°C	IR		0.2 50		mA
Typical junction capacitance (Note 1)	CJ		250		pF
Typical thermal resistance (Note 2)	R JC		3.2		/ W
Operating junction and storage temperature range	TJ,TSTG		-55 to +150		°C

Note : 1. Measured at 1.0MHz and applied reverse voltage of 4.0V.  
2. Thermal resistance junction to case.

# RATINGS AND CHARACTERISTIC CURVES SBL1040CT THRU SBL1060CT

FIG.1 - FORWARD CURRENT DERATING CURVE

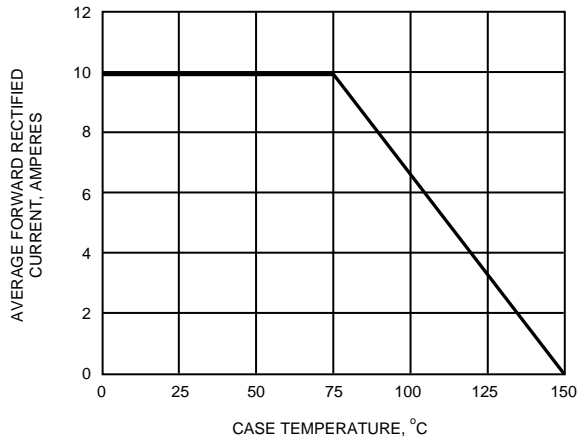


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

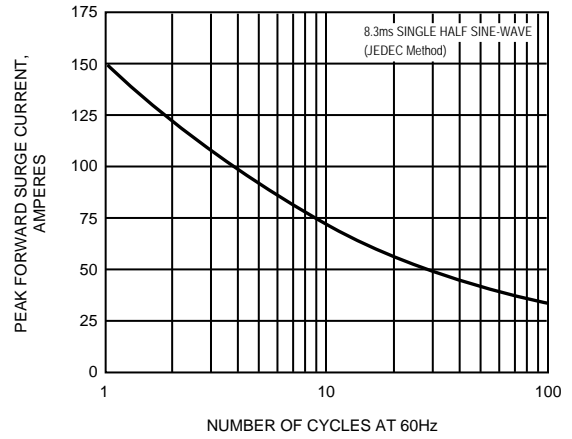


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

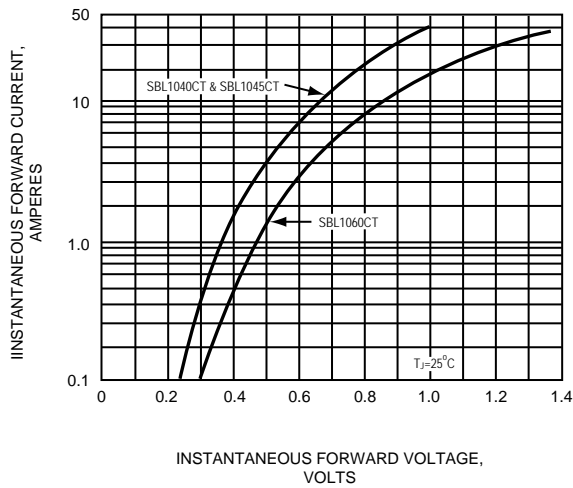


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

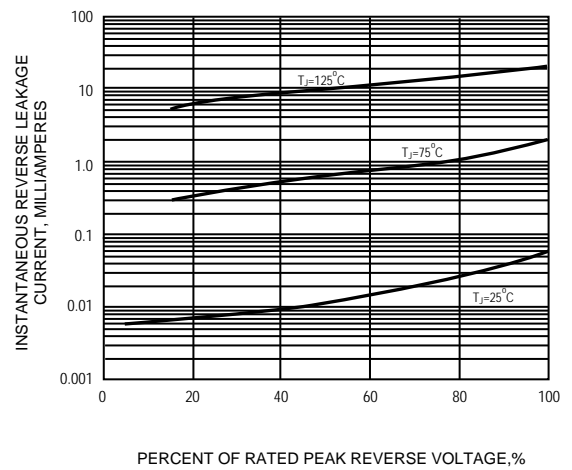


FIG.5 - TYPICAL JUNCTION CAPACITANCE

