



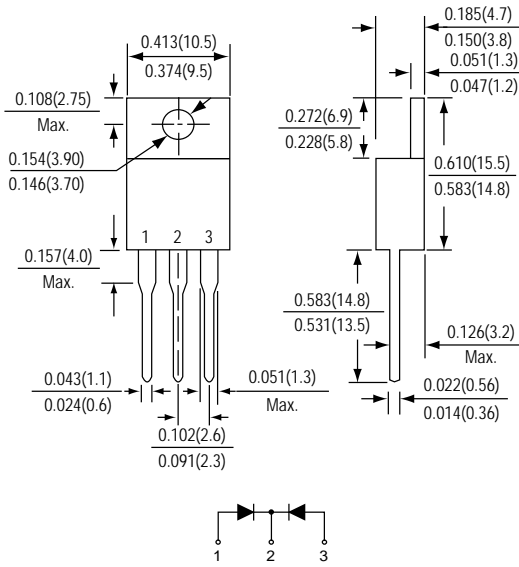
# SBL3030CT THRU SBL3060CT

## SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 30 to 60 Volts

Forward Current - 30 Amperes

### TO-220AB



\*Dimensions in inches and (millimeters)



### FEATURES

- \* Low Forward Voltage
- \* Low Switching noise
- \* High Current Capacity
- \* Guarantee Reverse Avalanche
- \* Guard-Ring for Stress Protection
- \* Low Power Loss & High efficiency
- \* Low Stored Charge Majority Carrier Conduction
- \* 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	SBL30						UNITS
		30CT	35CT	40CT	45CT	50CT	60CT	
Maximum repetitive peak reverse voltage	VRRM	30	35	40	45	50	60	Volts
Maximum RMS voltage	VRMS	21	25	28	31.5	35	42	Volts
Maximum DC blocking voltage	VDC	30	35	40	45	50	60	Volts
Maximum average forward rectified current at Tc=95°C	I (AV)	30						Amps
Peak repetitive forward current ( Rate VR, square wave, 20kHz )	IFRM	30						Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	250						Amps
Maximum instantaneous forward voltage ( IF=15 A, Tc=25°C ) ( IF=15 A, Tc=100°C )	VF	0.55 0.46			0.65 0.56			Volts
Maximum DC reverse current at rated DC blocking voltage	IR	@Tc=25°C @Tc=125°C 0.20 75						mA
Operating junction temperature range	TJ	-55 to +125						°C
Storage temperature range	TJ,TSTG	-55 to +150						°C

# RATINGS AND CHARACTERISTIC CURVES SBL3030CT THRU SBL3060CT

FIG.1 - FORWARD CURRENT DERATING CURVE

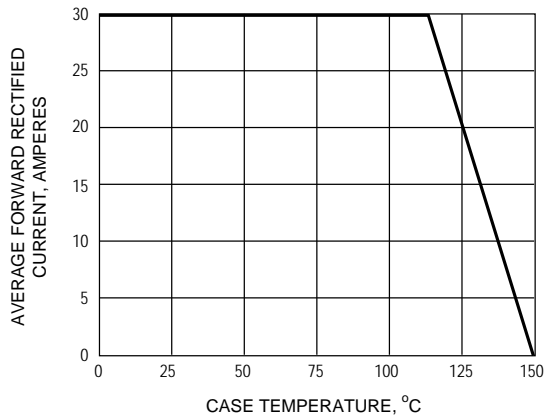


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

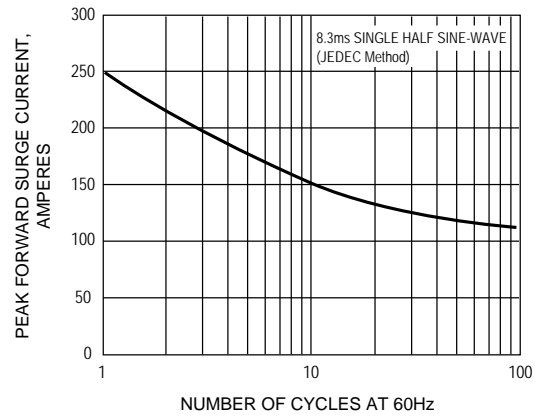


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

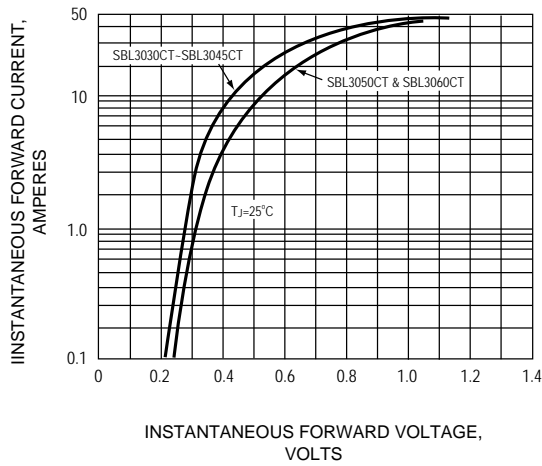


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

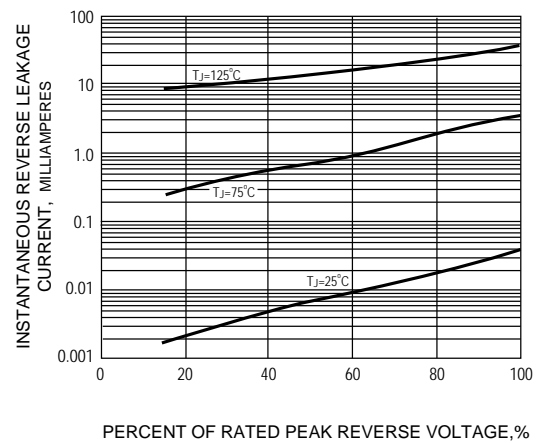


FIG.5 - TYPICAL JUNCTION CAPACITANCE

