



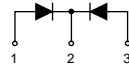
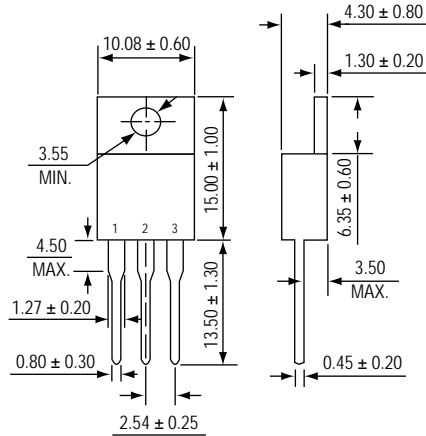
# SBL2040CTSH

## SCHOTTKY BARRIER RECTIFIER

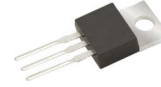
Reverse Voltage - 40 Volts

Forward Current - 20 Amperes

TO-220AB



\*Dimensions in millimeters



### FEATURES

- \* Halogen-free type
- \* Compliance to RoHS product
- \* Low power loss & high efficiency
- \* High surge capability
- \* 20 Amperes total (10 Amperes per diode leg)
- \* 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	SBL2040CTSH	UNITS
Maximum repetitive peak reverse voltage	VRRM	40	Volts
Maximum RMS voltage	VRMS	28	
Maximum DC blocking voltage	VDC	40	
Maximum average forward rectified current	I (AV)	20	Amps
Peak repetitive forward current (rated VR, square wave, 20KHz)	IFM	20	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	200	Amps
Maximum instantaneous forward voltage @ IF= 10 A	V <sub>F</sub>	T <sub>j</sub> =25°C 0.55 T <sub>j</sub> =125°C 0.50	Volts
Maximum DC reverse current at rated DC blocking voltage	I <sub>R</sub>	@T <sub>j</sub> =25°C 0.5 @T <sub>j</sub> =125°C 50	mA
Typical junction capacitance (Note)	C <sub>J</sub>	400	pF
Typical thermal resistance	R JA	15	/ W
Operating junction temperature	T <sub>J</sub>	125	
Storage temperature range	T <sub>STG</sub>	-55 to +150	

Note : Measured at 1.0MHz and applied reverse voltage of 4.0V.

# RATINGS AND CHARACTERISTIC CURVES OF SBL2040CTSH

FIG.1 - FORWARD CURRENT DERATING CURVE

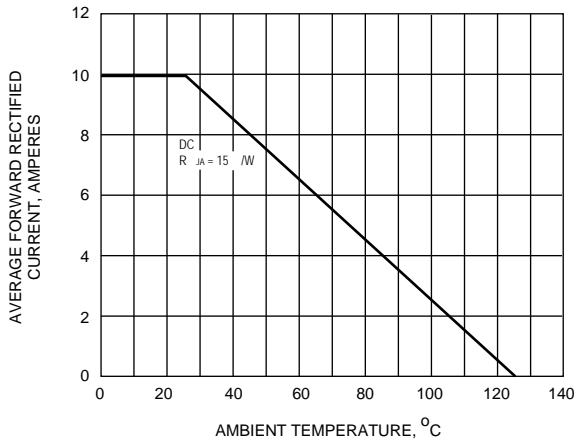


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

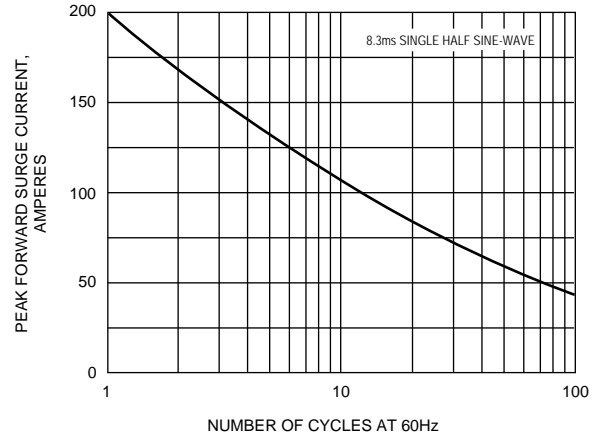


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

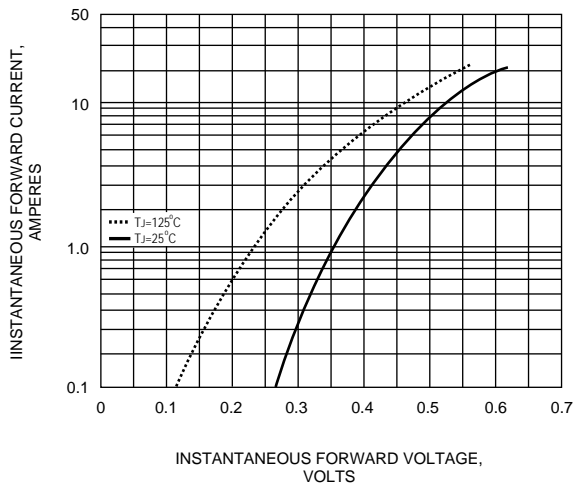


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

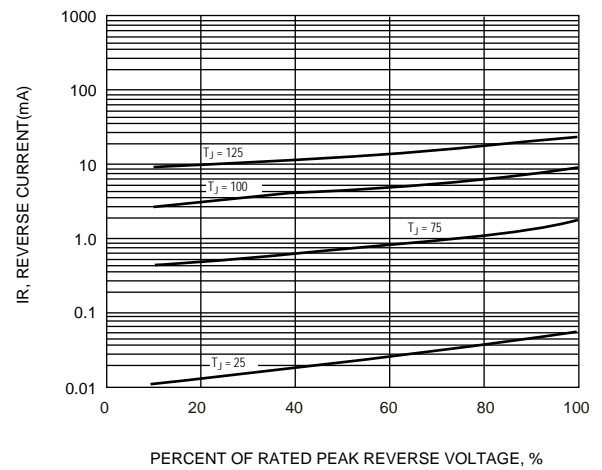
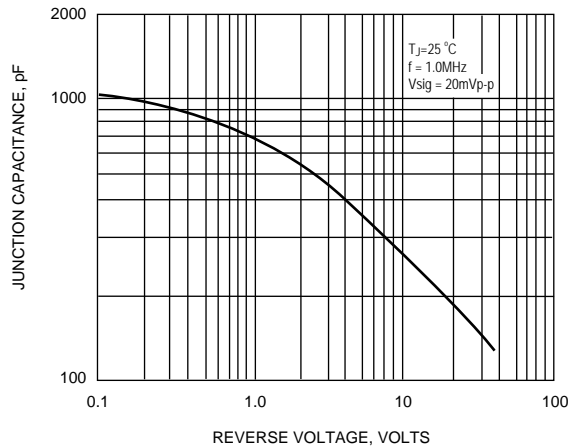


FIG.5 - TYPICAL JUNCTION CAPACITANCE



## PACKING INFORMATION

Package	Packing Qty.			Inner Box Size (mm)	Carton Size (mm)
	Tube (pcs)	Inner box (kpcs)	Carton (kpcs)		
TO-220AB	50	4	8	570 x 147 x 150	585 x 316 x 164