

# Preliminary\_SBL3040PT

## 30A SCHOTTKY BARRIER RECTIFIER

### Features

- Metal of silicon rectifier, majority carrier conduction
- Guard ring for transient protection
- Low power loss, high efficiency
- High current capability, low VF
- High surge capacity
- For use in low voltage, high frequency inverters, free
- Wheeling, and polarity protection applications
- RoHS compliant package

### Application

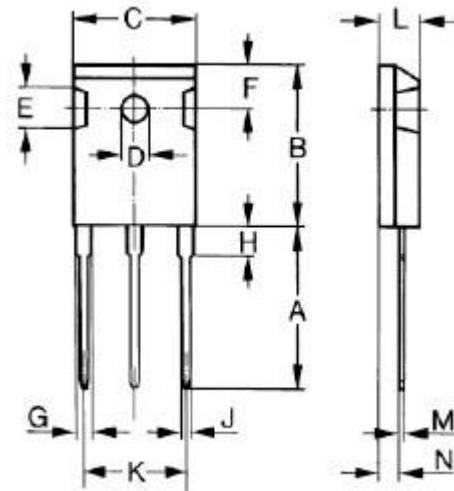
- DC/DC Converters
- AC/DC Adaptors

### Mechanical Data

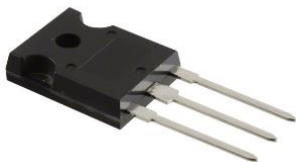
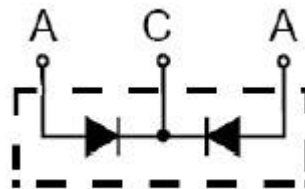
- Case: TO-247AD molded plastic
- Polarity: As marked on the body
- Weight: 0.2 ounces, 5.6 grams
- Mounting position: Any

### Packing & Order Information

50/Tube ; 1,000/Box



### Graphic symbol



**RoHS**  
COMPLIANT

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

### Maximum Ratings (Tc=25°C unless otherwise noted)

Parameter	Symbol	SBL3040PT	Unit
Maximum repetitive peak reverse voltage	VRRM	40	V
Working peak reverse voltage	VRWM	28	V
Maximum DC blocking voltage	VDC	40	V
Maximum average forward rectified current	IF(AV)	30	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	275	A
Operating junction temperature range	TJ	-55 to +150	°C
Storage temperature range	TSTG	-55 to +150	°C

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#### Electrical characteristics (Tc=25°C unless otherwise noted)

Parameter	Symbol	Value		Unit
		Typical	Max	
Instantaneous forward voltage at IF=15A, Tj=25°C	VF	--	0.55	V
Maximum reverse current per leg Tj=25°C	IR	1		u'A
at working peak reverse voltage Tj=100		7		m'A

#### Thermal characteristics (Tc=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Typical thermal resistance	Rthja	2	°C/W

**Notes:**

- (1) Pulse test: 300  $\mu$ s pulse width, 1 % duty cycle
- (2) Pulse test: Pulse width  $\leq$  40 ms
- (3) Cj Measured at 1.0MHz and reverse voltage of 4.0V DC.

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