

## 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

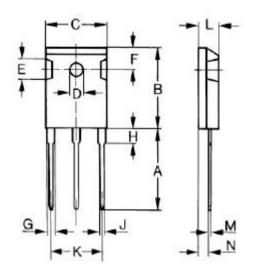
· Weight: 0.2 ounces, 5.6 grams

· Mounting position: Any

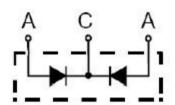
#### **Packing & Order Information**

50/Tube; 1,000/Box





#### Graphic symbol



#### 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	IFSM	275	A
on rated load (JEDEC Method)			
Operating junction temperature range	TJ	-55 to +150	°C
Storage temperature range	TSTG	-55 to +150	°C



# Preliminary\_SBL3040PT

### 30A SCHOTTKY BARRIER RECTIFIER

Electrical characteristics (Tc=25°C unless otherwise noted)						
Parameter	Symbol	Value		Unit		
		Typical	Max	Unit		
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 µs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

(3) Cj Measured at 1.0MHz and reverse voltage of 4.0V DC.



## Preliminary\_SBL3040PT

#### 30A SCHOTTKY BARRIER RECTIFIER

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Bruckewell Technology Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Bruckewell"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product. Bruckewell makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Bruckewell disclaims

- (i) Any and all liability arising out of the application or use of any product.
- (ii) Any and all liability, including without limitation special, consequential or incidental damages.
- (iii) Any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Bruckewell's knowledge of typical requirements that are often placed on Bruckewell products in generic applications.

Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time.

Product specifications do not expand or otherwise modify Bruckewell's terms and conditions of purchase, including but not limited to the warranty expressed therein.