

Preliminary SBL3045C

Low VF Schottky Barrier Rectifier

Features

- Low forward voltage drop, low power losses
- High efficiency operation
- Solder bath temperature 275 °C max. 10 s, per JESD 22-B106

22-B106

- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC
- RoHS compliant package

Mechanical Data

- Case: TO-220AB
- Molding compound meets UL 94 V-0 flammability
- RoHS compliant, and commercial grade
- Terminals: Matte tin plated leads, solderable per J-STD-002 and JESD 22-B102

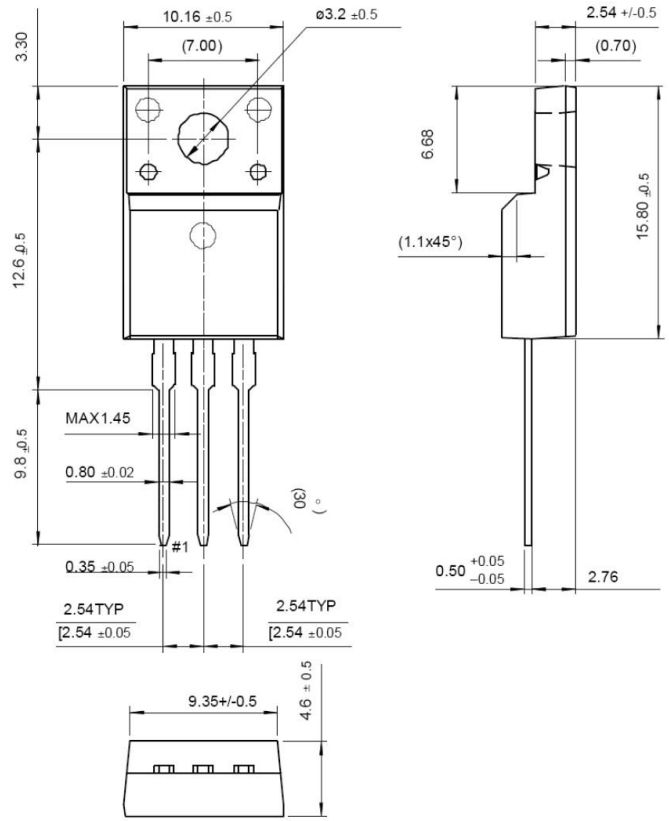
- Polarity: As marked

Packing & Order Information

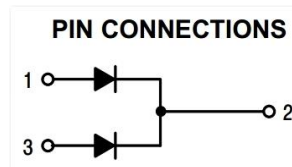
3,000/Reel



**RoHS
COMPLIANT**



Graphic symbol



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameter	Symbol	SBL3045C	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 per device per diode	IF(AV)	30 15	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	275	A
Voltage rate of change (rated VR)	dv/dt	10000	V/μs
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 at IF=15A, Tj=125°C	VF	0.54 0.40	0.57 0.44	V
Maximum reverse current per leg Tj=25°C	IR	1		m'A
at working peak reverse voltage Tj=125°C		50		m'A

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

Parameter	Symbol	Value	Unit
Typical thermal resistance	Rthjc	4.8	°C/W

Notes:

- (1) Pulse test: 300 μs pulse width, 1 % duty cycle
- (2) Pulse test: Pulse width ≤ 40 ms

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