

SBL3045CTP

### **30A SCHOTTKY BARRIER RECTIFIER**

### Features

- Low Forward Voltage Drop
- Soft, Fast Switching Capability
- Schottky Barrier Chip
- ITO-220S Heat Sink Tab Electrically Isolated from Cathode
- UL Approval in Accordance with UL 1557, Reference No. E94661

## **Mechanical Data**

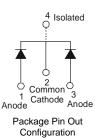
- Case: ITO-220S
- Case Material: Molded Plastic, UL Flammability Classification Rating 94V-0
- Terminals: Matte Tin Finish annealed over Copper leadframe. Solderable per MIL-STD-202, Method 208 <sup>(1)</sup>
- Weight: 1.335 grams (approximate)



Top View



Bottom View



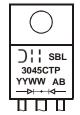
## Ordering Information (Notes 1 & 2)

Part Number	Case	Packaging
SBL3045CTP	ITO-220S	50 pieces/tube
SBL3045CTP-G	ITO-220S	50 pieces/tube

Notes: 1. For packaging details, go to our website at http://www.diodes.com.

2. For Green Molding compound version part number, add "-G" suffix to part number. Example: SBL3045CTP-G.

## **Marking Information**



SBL3045CTP = Product Type Marking Code AB = Foundry and Assembly Code YYWW = Date Code Marking YY = Last two digits of year (ex: 08 = 2008) WW = Week (01 - 53)



## Maximum Ratings (Per Leg) @T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitance load, derate current by 20%.					
Characteristic	Symbol	Value	Unit		
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>RM</sub>	45	V		
Average Rectified Output Current (Per Leg) (Total)		15 30	A		
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I <sub>FSM</sub>	230	А		
Isolation Voltage From Terminal Heatsink t = 1 min.	V <sub>AC</sub>	2000	V		

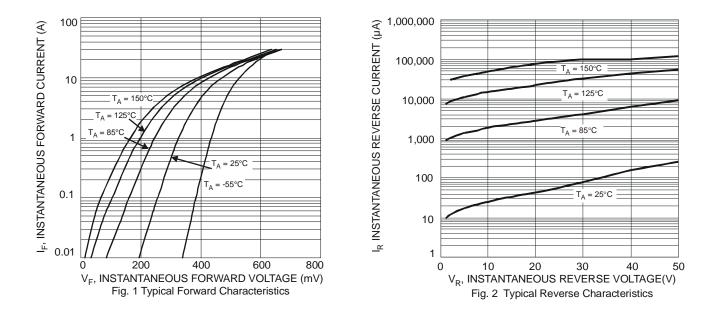
# **Thermal Characteristics (Per Leg)**

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance Junction to Case	$R_{\theta JC}$	3	°C/W
Operating and Storage Temperature Range	TJ, T <sub>STG</sub>	-65 to +150	°C

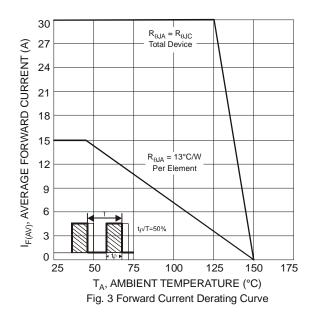
## Electrical Characteristics (Per Leg) @T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Forward Voltage Drop	$V_{F}$	-	-	0.62	V	I <sub>F</sub> = 15A, T <sub>J</sub> = 25°C
Lookage Current (Note 3)	1-	-	0.20	1	mA	$V_R = 45V, T_J = 25^{\circ}C$
Leakage Current (Note 3)	IR	-	-	75		V <sub>R</sub> = 45V, T <sub>J</sub> = 100°C

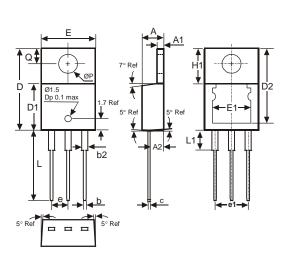
Notes: 3. Short duration pulse test used to minimize self-heating effect.







# Package Outline Dimensions



ITO-220S				
DIM.	MIN.	MAX.	TYP.	
Α	4.52	4.62	4.57	
A1	0.51	1.39	-	
A2	2.57	2.77	2.67	
b	0.72	0.95	0.84	
b2	1.15	1.54	1.26	
С	0.356	0.61	_	
D	14.22	16.51	15.00	
D1	8.60	8.80	8.70	
D2	13.68	14.08	-	
е	2.49	2.59	2.54	
e1	4.98	5.18	5.08	
Е	10.01	10.21	10.11	
E1	6.86	8.89	-	
H1	5.85	6.85	-	
L	13.30	13.90	13.60	
L1	_	4.00	-	
Ρ	3.54	4.08	-	
Q	2.54	3.42	-	
All Dimensions in mm				



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