

SBL3040CTP

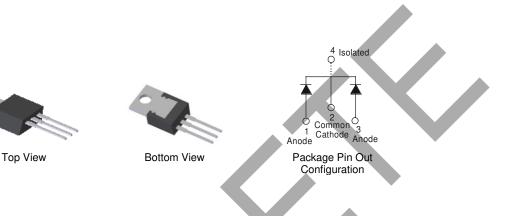
### **30A SCHOTTKY BARRIER RECTIFIER**

### 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 (2)
- Weight: 1.335 grams (approximate)



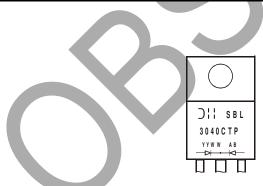
# Ordering Information (Notes 1 & 2)

Part Number	Case	Packaging
SBL3040CTP	ITO-220S	50 pieces/tube
SBL3040CTP-G	ITO-220\$	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: SBL3040CTP-G.

# **Marking Information**



SBL3040CTP = 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) @TA = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.

For capac	itance load	d. derate cu	rrent 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>	40	V	
Average Rectified Output Current	(Per Leg) (Total)	IO	15 30	А	
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load		I <sub>FSM</sub>	230	A	
Isolation Voltage From Terminal Heatsink t = 1 min.		V <sub>AC</sub>	2000	V	

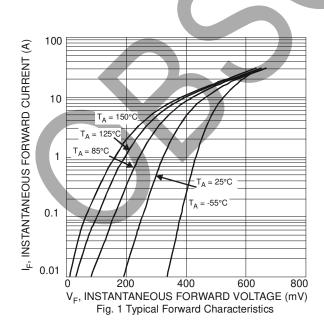
# **Thermal Characteristics (Per Leg)**

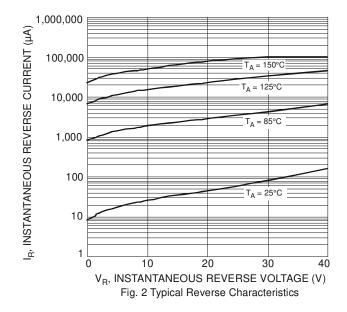
			*
Characteristic	Symbol	Value	Unit
Typical Thermal Resistance Junction to Case	$R_{ ext{ heta}JC}$	3	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +150	°C

### Electrical Characteristics (Per Leg) @TA = 25°C unless otherwise specified

Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Forward Voltage Drop	VF	-	-	0.60	V	$I_F = 15A, T_J = 25^{\circ}C$
Leakage Current (Note 3)		-	0.15	1	mA	$V_R = 40V, T_J = 25^{\circ}C$
Leakage Guileni (Note 3)	IR		-	75	IIIA	V <sub>R</sub> = 40V, T <sub>J</sub> = 100 <sup>o</sup> C

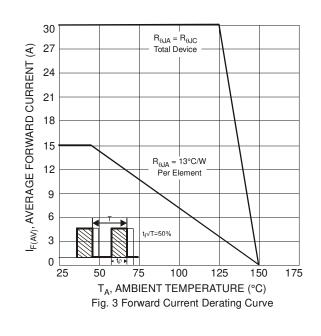
Note: 3. Short duration pulse test used to minimize self-heating effect.



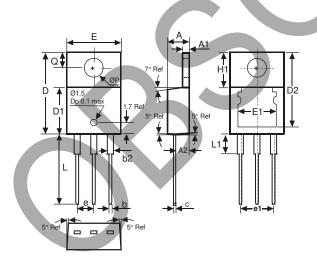




**OBSOLETE - PART DISCONTINUED** 



# 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					

#### SBL3040CTP Document number: DS31462 Rev. 7 - 4



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