

#### Features

- Halogen Free. "Green" Device (Note 1)
- Glass Passivated Chip Junction
- High Forward Surge Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (Note 2)("P" Suffix Designates RoHS Compliant. See Ordering Information)

TBL	
	E

6 Amp

Low VF Bridge

Rectifier

800 Volts

DIMENSIONS					
DIM INC		HES	MM		NOTE
DIN	MIN	MAX	MIN	MAX	NOTE
Α	0.394	0.409	10.00	10.40	
В	0.382	0.398	9.70	10.10	
С	0.268	0.283	6.80	7.20	
D	0.051	0.059	1.30	1.50	
E	0.055	0.071	1.40	1.80	
F	0.020	0.043	0.50	1.10	
G	0.000	0.006	0.00	0.15	
Н	0.193	0.201	4.90	5.10	

# Suggested Solder Pad Layout (mm) 5.00 - 9.25

## Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value	— Unit	
Farameter	Symbol	TBL608L		
Peak Repetitive Reverse Voltage	$V_{RRM}$			
Working Peak Reverse Voltage	V <sub>RWM</sub>	800	V	
DC Blocking Voltage	$V_{R}$			
RMS Reverse Voltage	V <sub>RMS</sub>	560	V	
Average Rectified Forward Current @ T <sub>C</sub> =110°C	I <sub>F(AV)</sub>	6	А	
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	I	200		
Non-Repetitive Peak Surge Current @ 1ms Square Wave	I <sub>FSM</sub>	400	A	
Current Squared Time @1ms≤t≤8.3ms	l <sup>2</sup> t	166	A²s	

## Internal Structure

Simplified Outline	Graphic Symbol		
- + MCC TBL608L ~ ~			

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

2. High temperature solder exemption applied, see EU directive annex 7a.



## Thermal characteristics

Symbol	Parameter	Conditions	Min	Тур	Max	Unit
TJ	Operating Junction Temperature Range		-55		150	°C
T <sub>stg</sub>	Storage Temperature Range		-55		150	°C
Rth <sub>(J-L)</sub>	Thermal Resistance from Junction to Case	Note 1		5		°C/W
Rth <sub>(J-A)</sub>	Thermal Resistance from Junction to Lead	Note 1		10		°C/W
Rth <sub>(J-A)</sub>	Thermal Resistance from Junction to Ambient	Note 1		55		°C/W

Note:

1.Device mounted on P.C.B with 35mm\*25mm\*1.7mm.

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Тур	Max	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =3A;T <sub>J</sub> =25°C		0.875	0.92	V
Reverse Current	I <sub>R</sub>	at Rated V <sub>R</sub> ;T <sub>J</sub> =25°C at Rated V <sub>R</sub> ;T <sub>J</sub> =125°C			5 100	μA
Junction Capacitance	CJ	V <sub>R</sub> =4V;f=1MHz;T <sub>J</sub> =25°C		55		pF



#### **Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

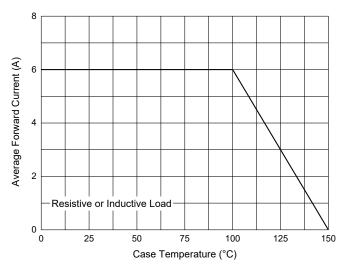


Fig. 3 - Typical Forward Characteristics

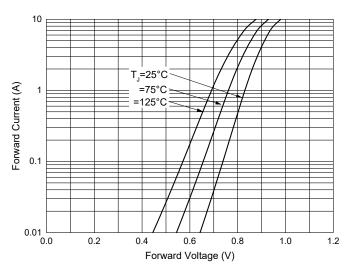
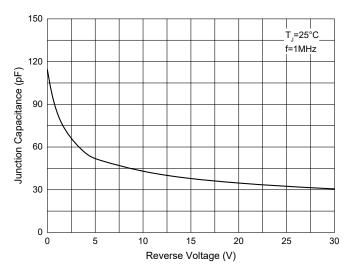


Fig. 5 - Typical Capacitance Characteristics



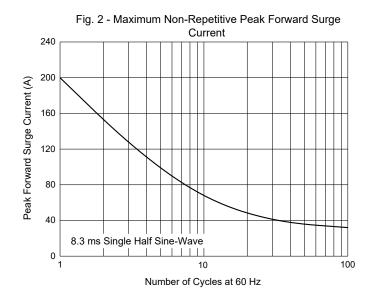
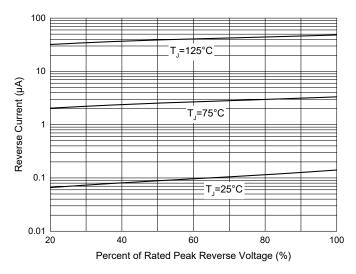


Fig. 4 - Typical Reverse Leakage Characteristics





#### Ordering Information

Device	Packing		
TBL608L-TP	Tape&Reel: 1.8Kpcs/Reel		

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