

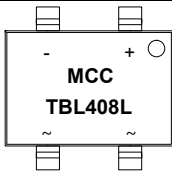
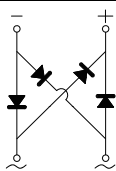
Features

- 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)

Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value	Unit
		TBL408L	
Peak Repetitive Reverse Voltage	V_{RRM}	800	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	V_{RMS}	560	V
Average Rectified Forward Current @ $T_C=100^\circ\text{C}$	$I_{F(AV)}$	4	A
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	I_{FSM}	150	A
Non-Repetitive Peak Surge Current @ 1ms Square Wave		300	
Current Squared Time @ $1\text{ms} \leq t \leq 8.3\text{ms}$	I^2t	93	A ² s

Internal Structure

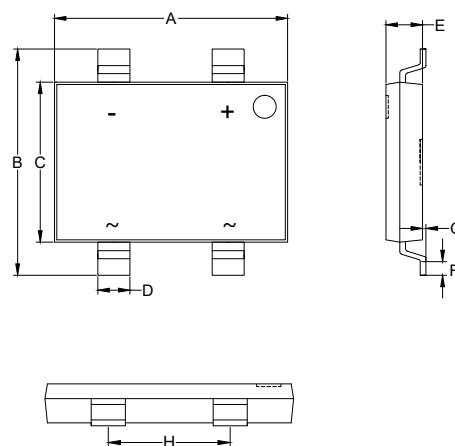
Simplified Outline	Graphic Symbol
	

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.

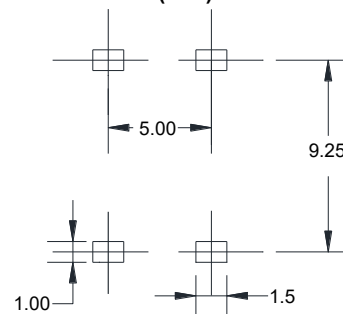
4 Amp Low VF Bridge Rectifier 800 Volts

TBL



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.394	0.409	10.00	10.40	
B	0.382	0.398	9.70	10.10	
C	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	
H	0.193	0.201	4.90	5.10	

Suggested Solder Pad Layout (mm)



Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T_J	Operating Junction Temperature Range		-55		150	°C
T_{stg}	Storage Temperature Range		-55		150	°C
$R_{th(J-L)}$	Thermal Resistance from Junction to Case	Note 1		7		°C/W
$R_{th(J-A)}$	Thermal Resistance from Junction to Lead	Note 1		12		°C/W
$R_{th(J-A)}$	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	Typ	Max	Unit
Forward Voltage	V_F	$I_F=2A; T_J=25^{\circ}C$		0.87	0.92	V
Reverse Current	I_R	at Rated $V_R; T_J=25^{\circ}C$ at Rated $V_R; T_J=125^{\circ}C$			5 100	μA
Junction Capacitance	C_J	$V_R=4V; f=1MHz; T_J=25^{\circ}C$		38		pF

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

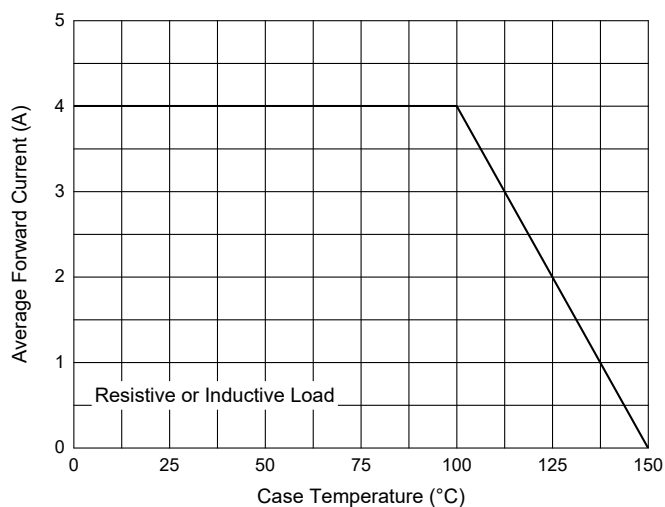


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

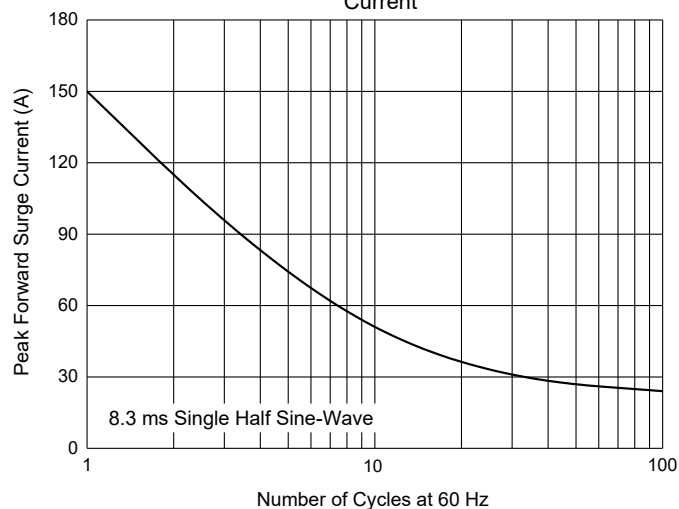


Fig. 3 - Typical Forward Characteristics

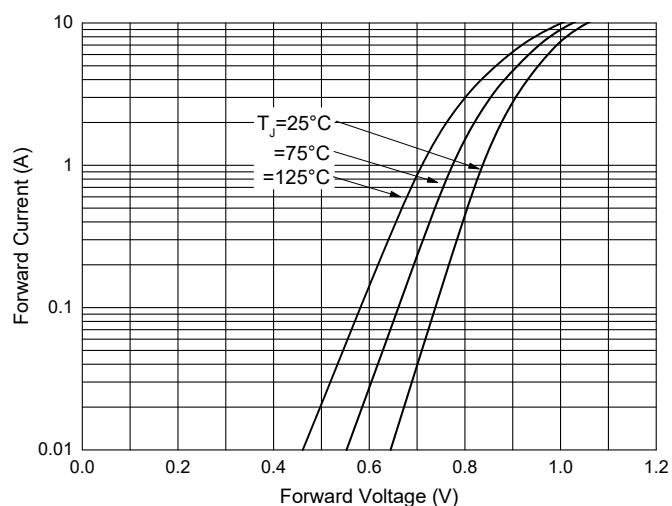


Fig. 4 - Typical Reverse Leakage Characteristics

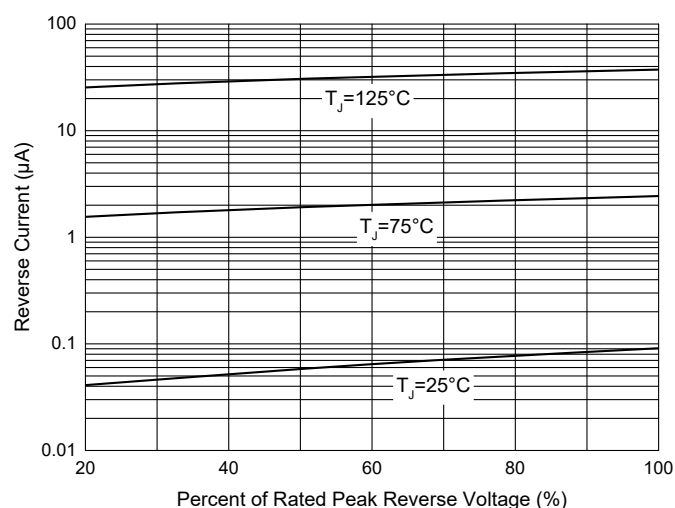
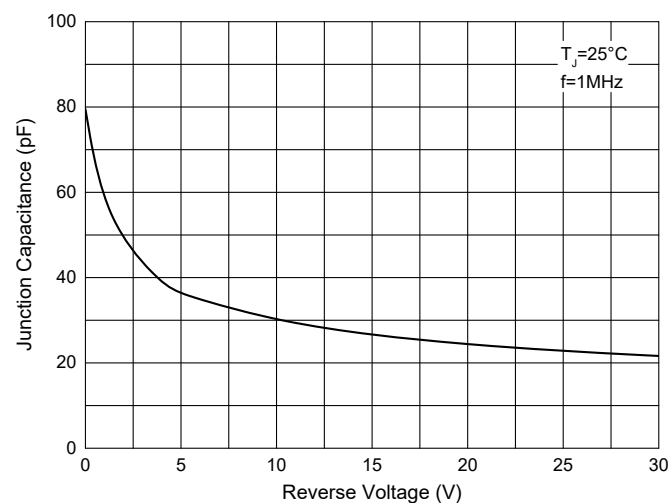


Fig. 5 - Typical Capacitance Characteristics



Ordering Information

Device	Packing
TBL408L-TP	Tape&Reel: 1.8Kpcs/Reel

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