



E540886

Features

- Halogen Free. "Green" Device (Note 1)
- Glass Passivated Chip Junction
- Low Forward Voltage Drop
- 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)

15 Amp Low VF Bridge Rectifier 800 Volts

Maximum Ratings @ 25°C (Unless Otherwise Specified)

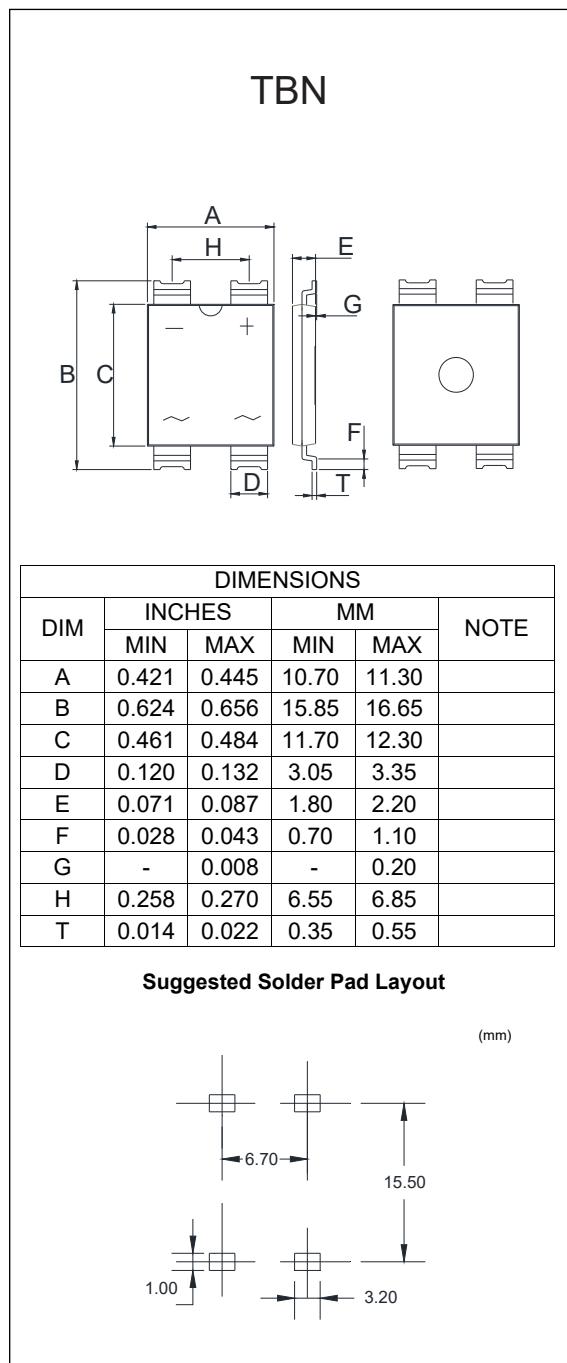
Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}		V
Working Peak Reverse Voltage	V_{RWM}	800	V
DC Blocking Voltage	V_R		
RMS Reverse Voltage	V_{RMS}	560	V
Average Rectified Forward Current @ $T_c=95^\circ\text{C}$	$I_{F(AV)}$	15	A
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	I_{FSM}	400	A
Non-Repetitive Peak Surge Current @ 1ms Square Wave		800	
Current Squared Time @ $1\text{ms} \leq t \leq 8.3\text{ms}$	I^2t	664	A^2s

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.



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
$R_{th(J-C)}$	Thermal Resistance from Junction to Case	Note 1		2		°C/W
$R_{th(J-L)}$	Thermal Resistance from Junction to Lead	Note 1		10		°C/W
$R_{th(J-A)}$	Thermal Resistance from Junction to Ambient	Note 1		50		°C/W

Note:

1.Device mounted on P.C.B with 30mm*15mm*1.6mm.

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=7.5A; T_J=25^\circ C$		0.89	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	$V_R=4V; f=1MHz; T_J=25^\circ C$		120		pF

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

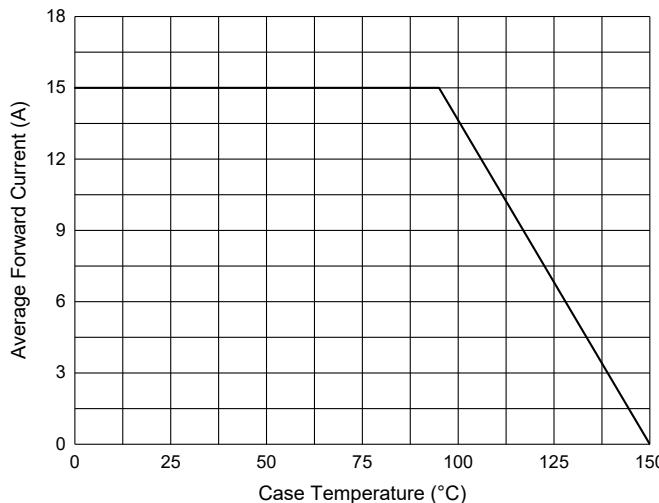


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

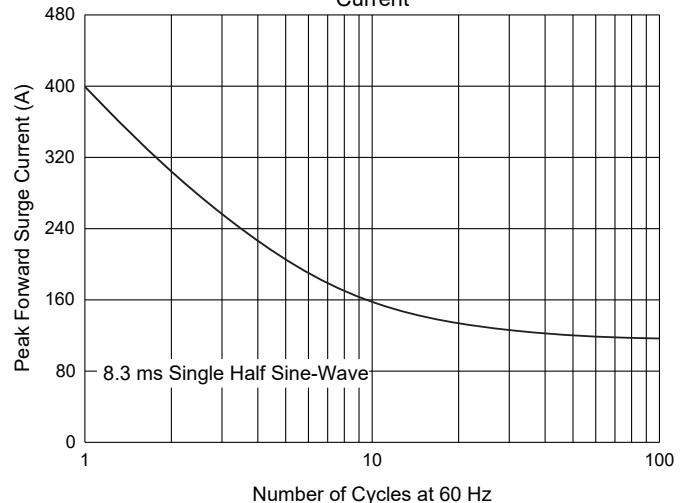


Fig. 3 - Typical Forward Characteristics

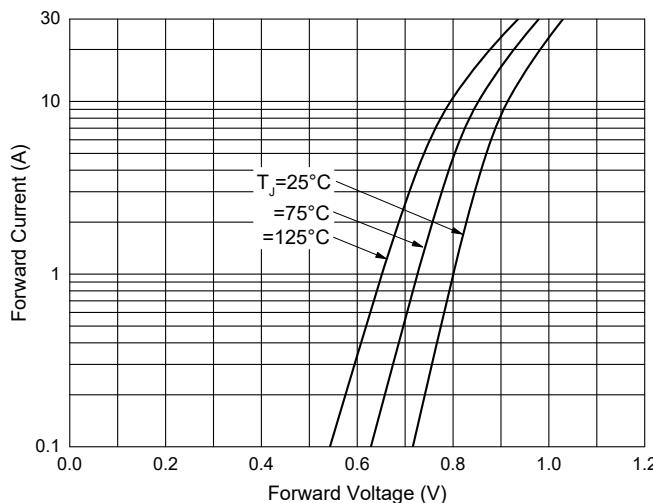


Fig. 4 - Typical Reverse Leakage Characteristics

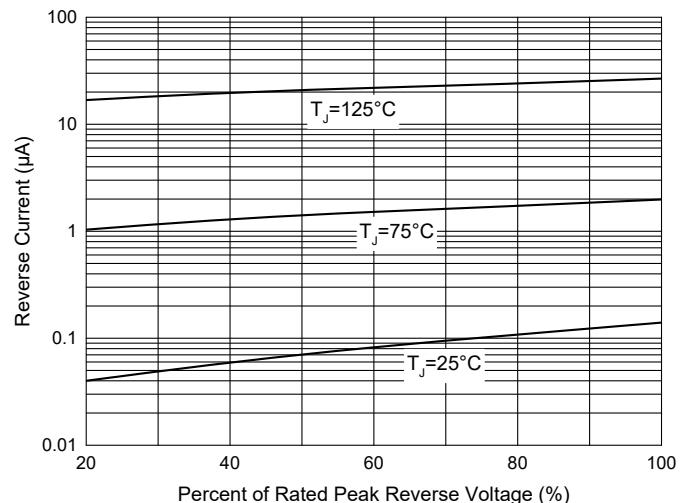
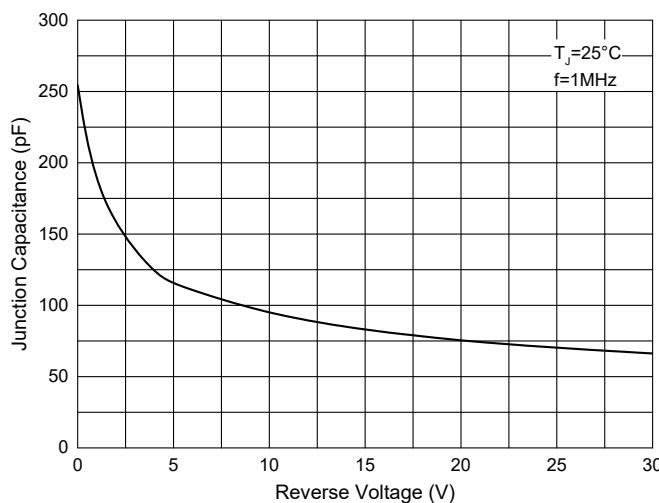


Fig. 5 - Typical Capacitance Characteristics



Ordering Information

Device	Packing
TBN1508L-TP	Tape&Reel: 1.5 Kpcs/Reel

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