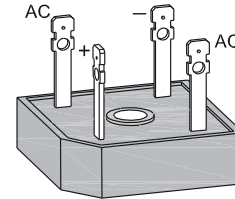


## 15.0A Single-Phase Bridge Rectifier

### Features

- High forward surge current capability
- Ideal for printed circuit board
- High temperature soldering guaranteed:  
260°C/10 seconds, 5 lbs (2.3kg) tension
- RoHS Compliant



TB35



### Mechanical Data

<b>Case:</b>	Molded plastic body with Metal Heat Sink
<b>Polarity:</b>	Polarity symbols marked on case
<b>Terminals:</b>	Plated 0.25" (6.35mm) lug
<b>Mounting Position:</b>	Thru hole for #10 screw, 20 in -lbs. torque max
<b>Weight:</b>	0.53 ounce, 15 grams

### Maximum Ratings & Electrical Characteristics *(T<sub>Ambient</sub>=25°C unless noted otherwise)*

Symbols	Description	TB1505	TB151	TB152	TB154	TB156	TB158	TB1510	Unit
<b>VRRM</b>	Max. recurrent peak reverse voltage	50	100	200	400	600	800	1000	V
<b>VRMS</b>	Max. RMS voltage	35	70	140	280	420	560	700	V
<b>VDC</b>	Max. DC blocking voltage	50	100	200	400	600	800	1000	V
<b>I<sub>o(AV)</sub></b>	Max. average forward rectified current @ TC=55° C	15.0							A
<b>I<sub>FSM</sub></b>	Peak forward surge current (Note 1)	300							A
<b>I<sup>2</sup>t</b>	Rating for Fusing (t<8.3ms)	373							A <sup>2</sup> sec
<b>V<sub>ISO</sub></b>	Isolation Voltage from case to lugs	2500							V
<b>C<sub>j</sub></b>	Typical Capacitance Junction(per element)(Note 2)	300							pF
<b>T<sub>J</sub></b>	Operating junction temperature range	-65 to +150							° C
<b>T<sub>STG</sub></b>	Storage Temperature Range	-65 to +150							° C

# 15.0A SINGLE-PHASE BRIDGE RECTIFIER

## TB1505 -TB1510

Symbol	Description	TB1505	TB151	TB152	TB154	TB156	TB158	TB1510	Unit
<b>V<sub>F</sub></b>	Maximum Instantaneous Forward Voltage Drop Per Leg@7.5 A	1.1							V
<b>I<sub>R</sub></b>	Maximum DC Reverse Current Rated DC Blocking Voltage	T <sub>A</sub> =25° C		10.0					uA
		T <sub>A</sub> =100° C		500					uA
<b>R<sub>θ-JC</sub></b>	Maximum Thermal Resistance (Note 3)	2.0							° C/W

### NOTES:

1. 8.3ms single half sine-wave superimposed on rated load (JEDEC method).
2. Measured at 1MHz and applied reverse voltage of 4.0Volts D.C.
3. Thermal resistance junction to case mounted on heat sink.

## Typical Characteristics Curves

Fig.1- Typical Forward Current Derating Curve

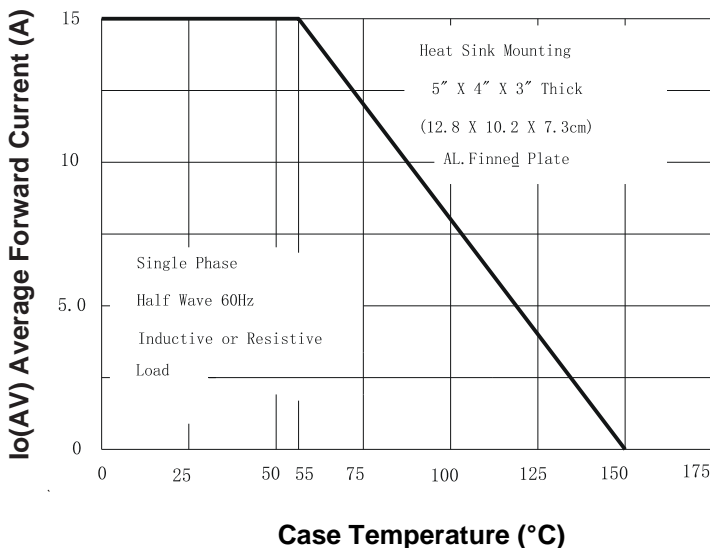
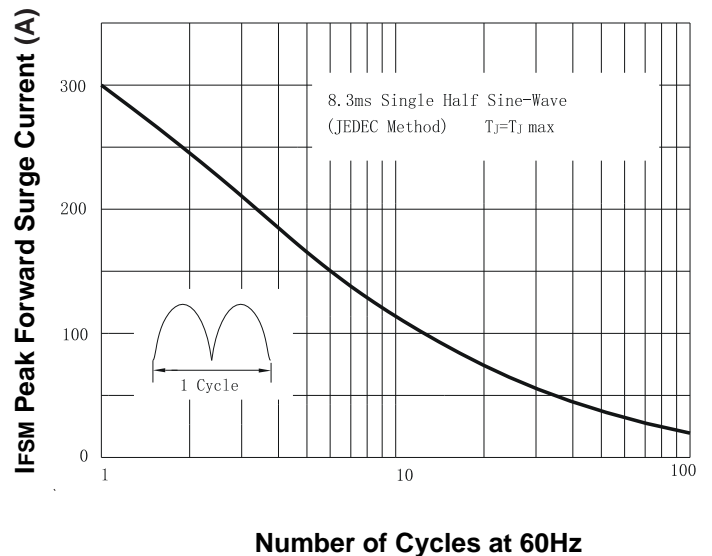


Fig.2-Max. Non-repetitive Peak Forward Surge Current



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## TB1505 -TB1510

Fig.3- Typical Instantaneous Forward Characteristics

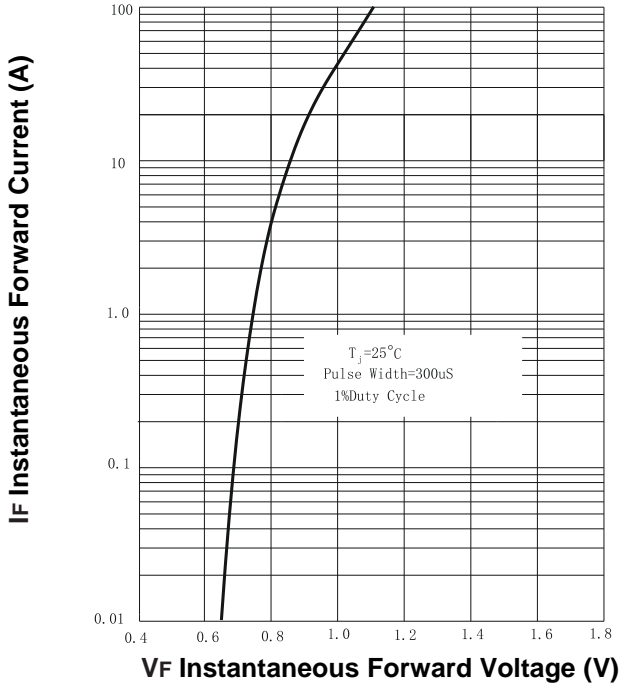


Fig.4- Typical Reverse Characteristics

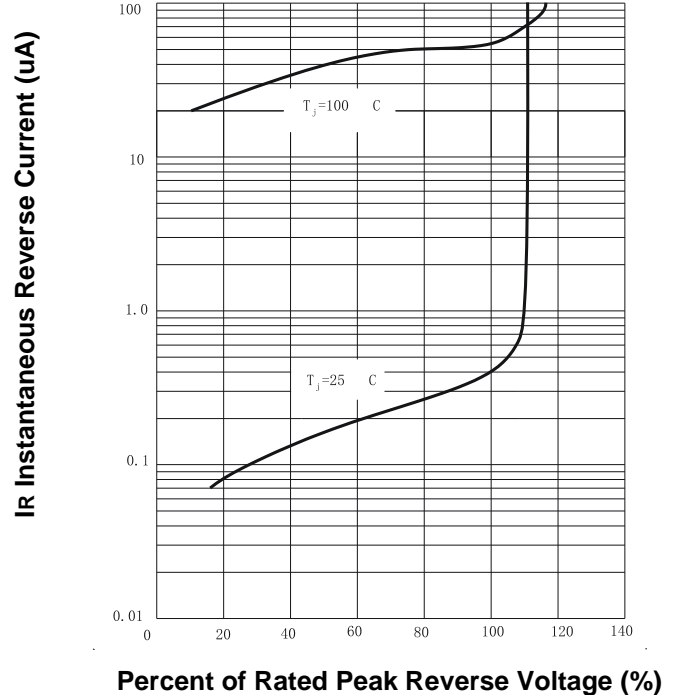
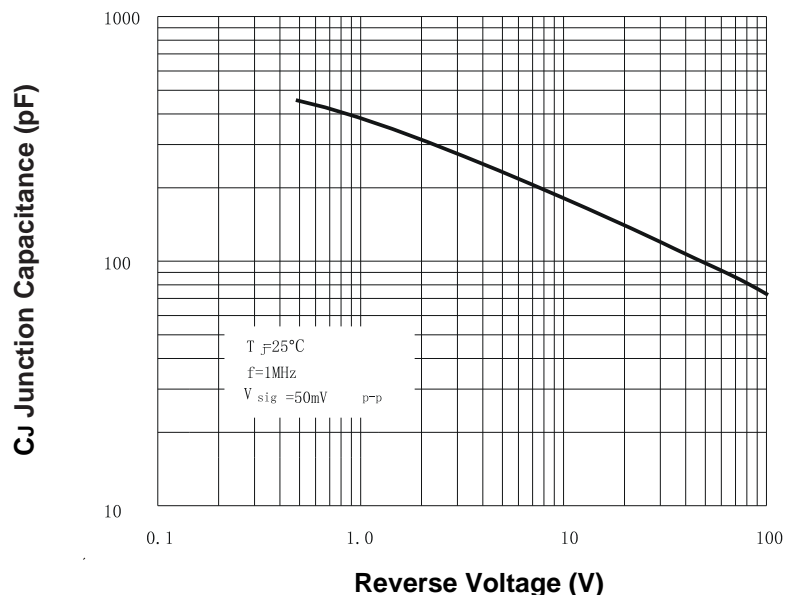


Fig.5-Typical junction capacitance

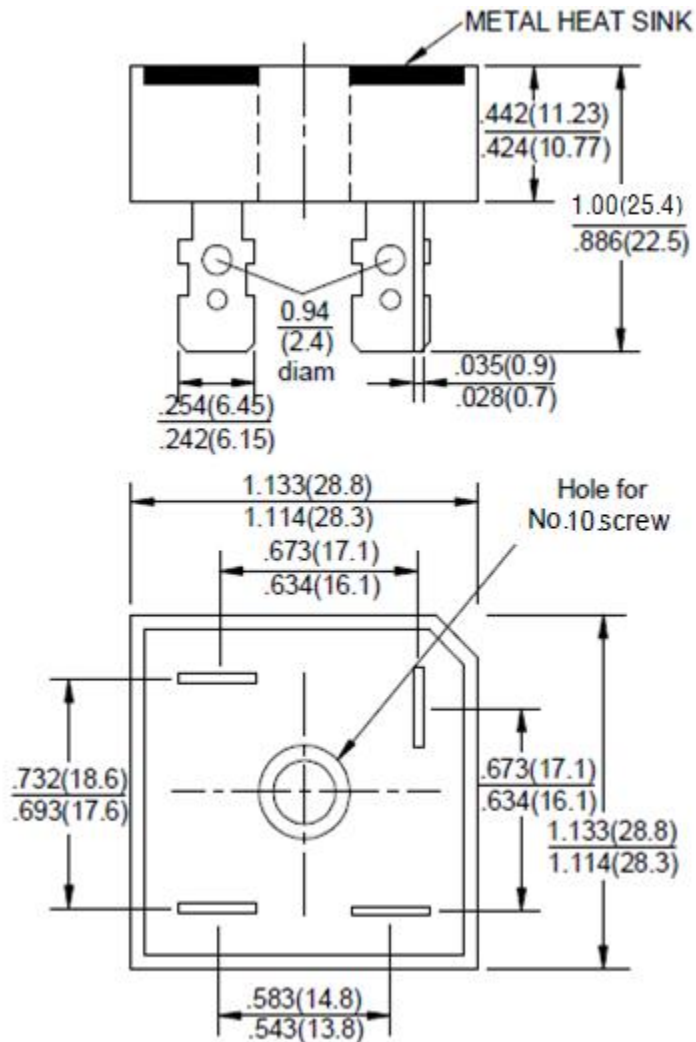


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TB1505 -TB1510

Dimensions in inches (mm)

TB35



# 15.0A SINGLE-PHASE BRIDGE RECTIFIER

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TB1505 -TB1510

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