

## 8A Bridge Rectifiers

### Features

- Low forward voltage drop
- High current capability, high reliability
- High forward surge current capability
- Ideal for printed circuit board
- High temperature soldering guaranteed:  
260° C/10 seconds, / .375" (9.5mm) lead length at 5 lbs.(2.3kg) tension
- This series is UL recognized under component index, File number E194718
- RoHS compliant



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### Mechanical Data

<b>Case:</b>	Molded plastic
<b>Terminals:</b>	Plated leads solderable per MIL-STD-202E, Method 208C
<b>Polarity:</b>	As marked on body
<b>Mounting Torque:</b>	8.8 in. – lbs. max.
<b>Weight:</b>	0.3 ounces, 8.0 grams

### Maximum Ratings And Electrical Characteristics (T<sub>amb</sub>=25°C)

Symbols	Parameter	TU 800	TU 801	TU 802	TU 804	TU 806	TU 808	TU 810	Unit	Conditions
<b>VRRM</b>	Maximum Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
<b>VRMS</b>	Maximum RMS Voltage	35	70	140	280	420	560	700	V	
<b>VDC</b>	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V	
<b>IF(AV)</b>	Maximum Average Forward Rectified Current (Note 1)	8.0							A	TC=100°C
<b>IFSM</b>	Peak Forward Surge Current	300							A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)
<b>VF</b>	Maximum Instantaneous Forward Voltage Drop per leg	1.0							V	IF=8.0A
<b>IR</b>	Maximum DC Reverse Current at Rated DC Blocking Voltage per leg	5.0							µA	TA=25°C
		1.0							mA	TA=100°C

# 8A Bridge Rectifiers

## TU800 - TU810

Symbols	Parameter	TU 800	TU 801	TU 802	TU 804	TU 806	TU 808	TU 810	Unit	Conditions
$I_{t}$	Rating for Fusing (1ms<t<8.3ms)	373							A <sup>2</sup> S	
$C_J$	Typical Junction Capacitance	200							pF	$V_R=4V, f=1MHz$
$R_{\theta JA}$	Typical Thermal Resistance per leg	18							°C/W	(Note 2)
$R_{\theta JC}$	Typical Thermal Resistance per leg	5.0							°C/W	(Note 1)
$T_J, T_{STG}$	Operating and Storage Temperature Range	-55 to 150							°C	

### Note:

- Unit mounted on 3.0" x 3.0" x 0.11" thick (7.5 x 7.5 x 0.3cm) Al. plate.
- Unit mounted in free air, no heatsink, P.C.B at 0.375" (9.5mm) lead length with 0.5" x 0.5" (12 x 12mm) copper pads
- Single Phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

### Rating and characteristic curves

Fig.1- Derating Curve Output Rectified Current

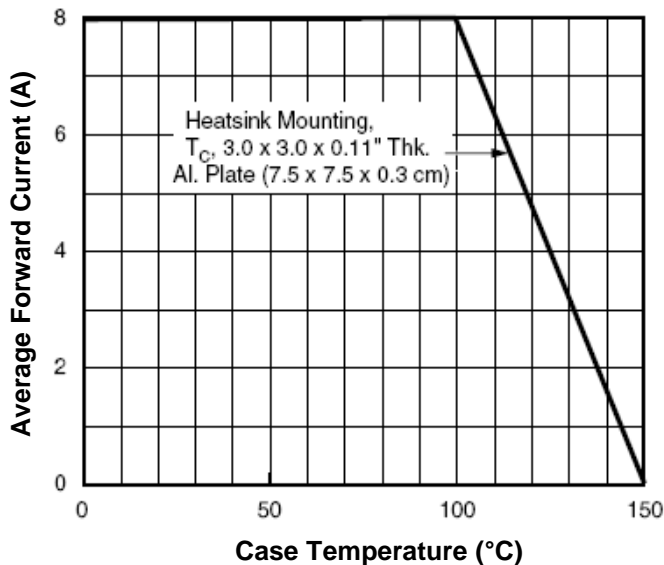
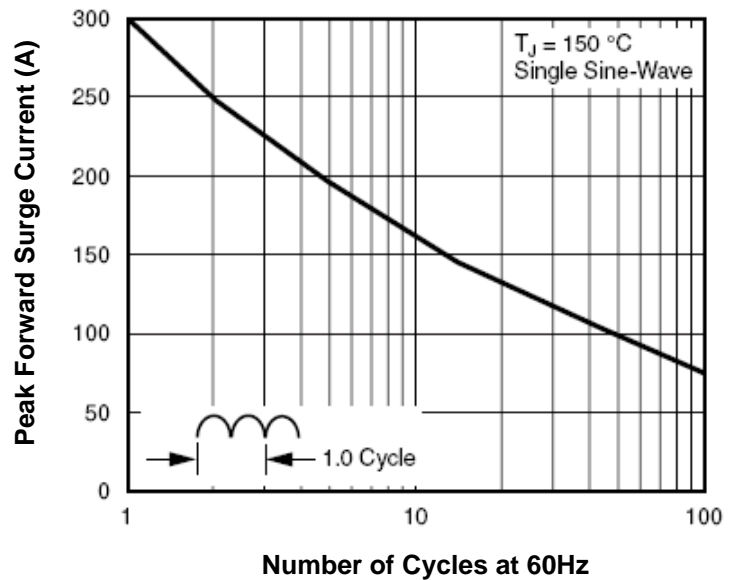
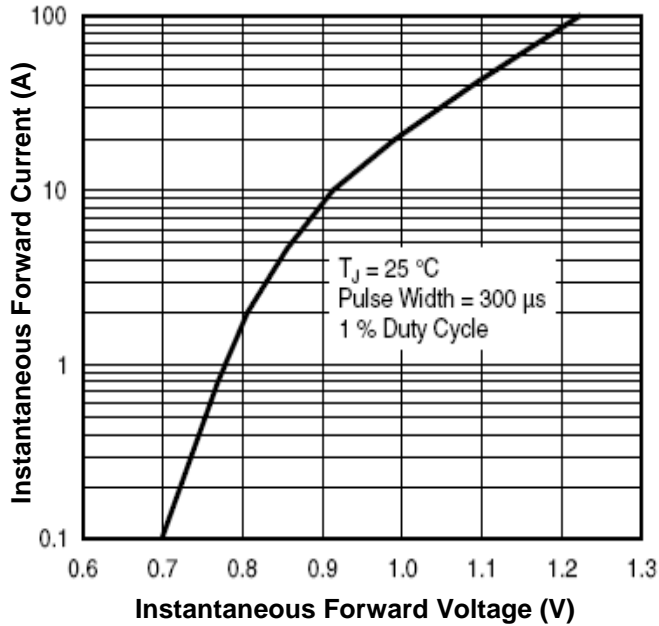


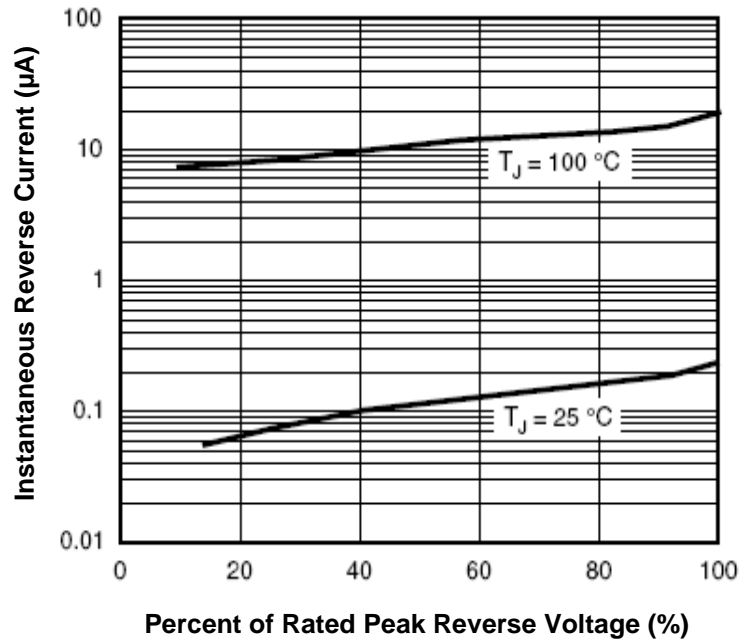
Fig.2-Max Non-Repetitive Peak Forward Surge Current per leg



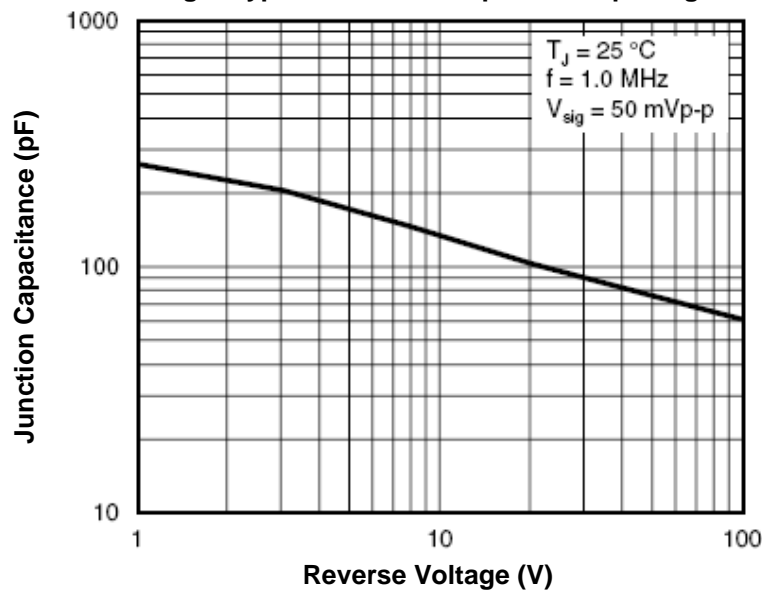
**Fig.3- Typical Instantaneous Forward Characteristics, per leg**



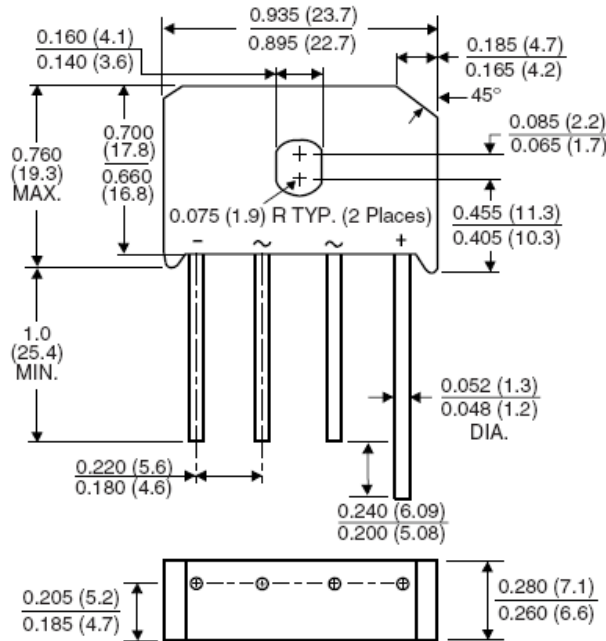
**Fig.4-Typical Reverse Leakage Characteristics per leg**



**Fig.5-Typical Junction Capacitance per leg**



### Dimensions in inch (mm)



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