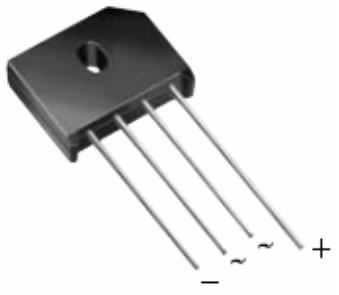
10A Bridge Rectifiers



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RoHS Compliant

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
- RoHS compliant

Mechanical Data

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

Maximum Ratings And Electrical Characteristics (T_{amb}=25˚C)

Symbols	Parameter	TU 1000	TU 1001	TU 1002	TU 1004	TU 1006	TU 1008	TU 1010	Unit	Conditions
V_{RRM}	Maximum Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
V_{RMS}	Maximum RMS Voltage	35	70	140	280	420	560	700	V	
V_{DC}	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V	
$I_{F(AV)}$	Maximum Average Forward Rectified Current (Note 1)	10							A	T_C=100˚C
I_{FSM}	Peak Forward Surge Current	300							A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)
V_F	Maximum Instantaneous Forward Voltage Drop per leg	1.1							V	I_F=10.0A
I_R	Maximum DC Reverse Current at Rated DC Blocking Voltage per leg	5.0							µA	T_A=25°C
		1.0							mA	T_A=100°C

Symbols	Parameter	TU 1000	TU 1001	TU 1002	TU 1004	TU 1006	TU 1008	TU 1010	Unit	Conditions
I^2t	Rating for Fusing (1ms<t<8.3ms)	373							A^2S	
C_J	Typical Junction Capacitance	200							pF	V_R=4V, f=1MHz
$R_{\theta JA}$	Typical Thermal Resistance per leg	16							˚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:

1. Unit mounted on 6.0” x 5.5” x 0.24” thick (15 x 14 x 0.6cm) Al. plate.
2. 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
3. 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

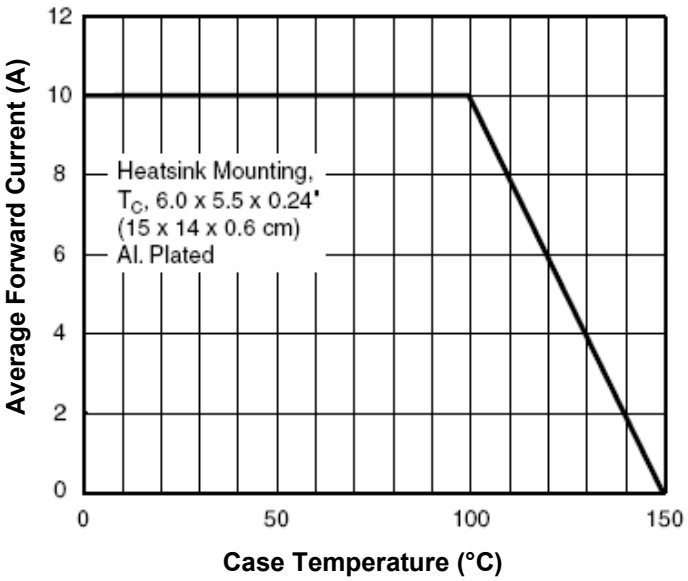


Fig.2-Max Non-Repetitive Peak Forward Surge Current per leg

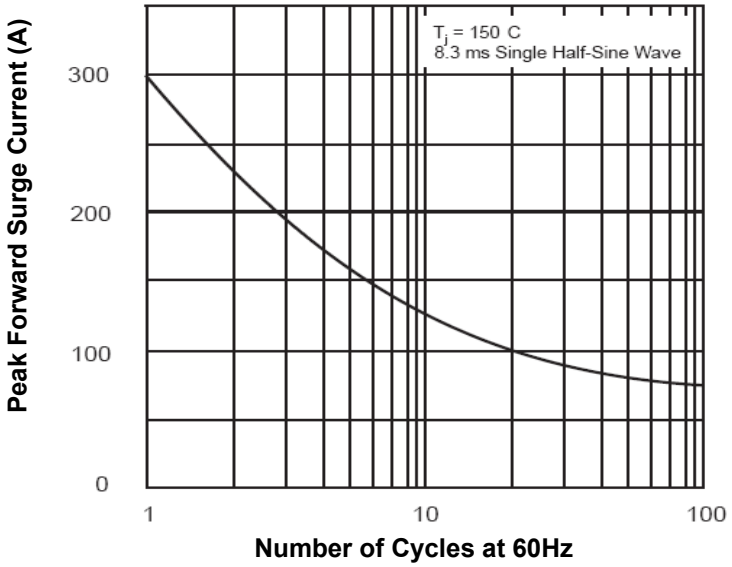


Fig.3- Typical Instantaneous Forward Characteristics, per leg

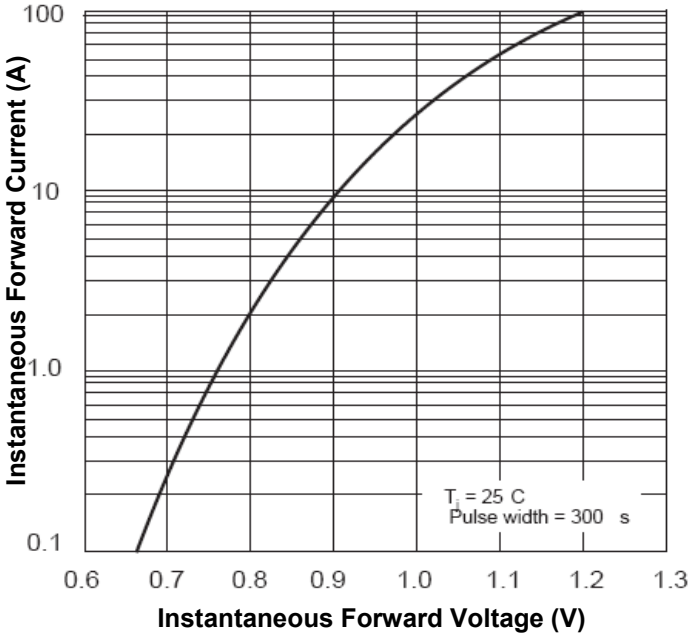


Fig.4-Typical Reverse Leakage Characteristics per leg

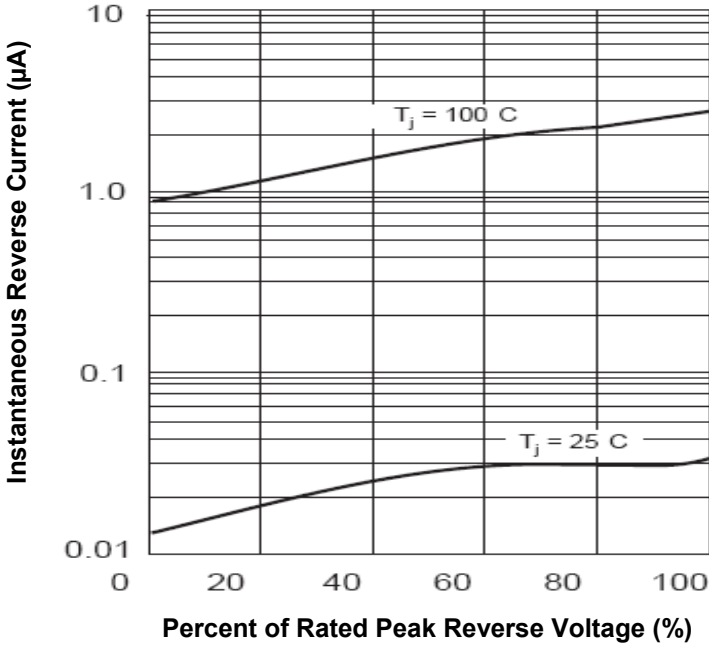
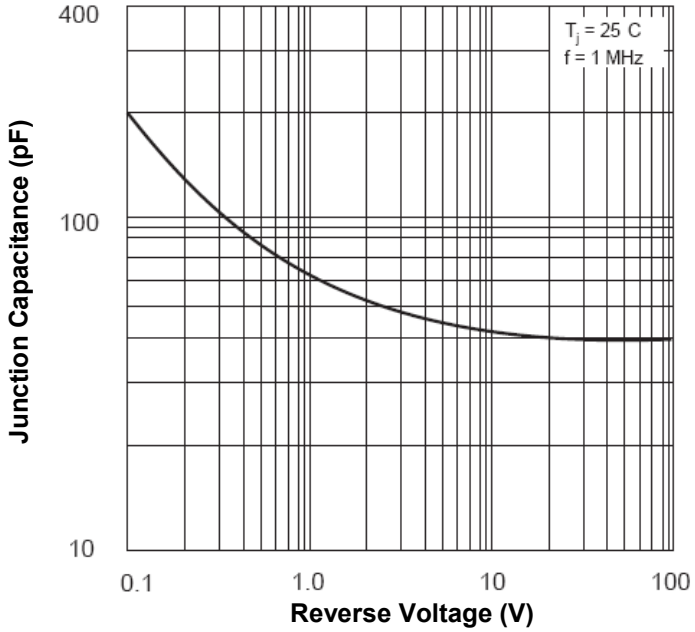
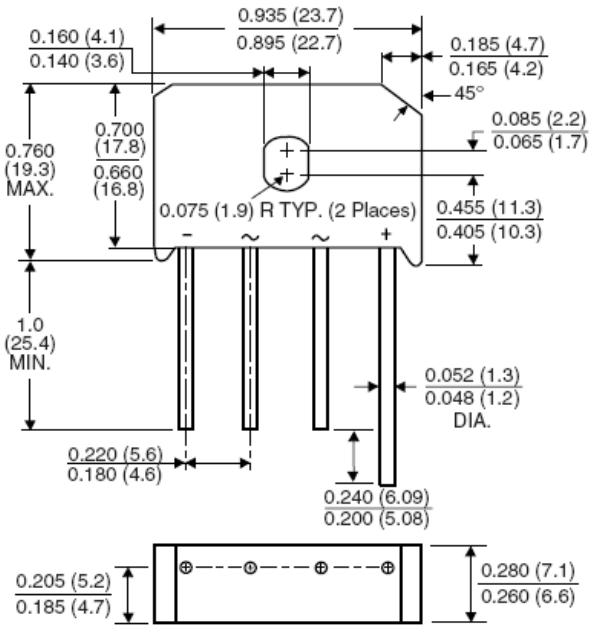


Fig.5-Typical Junction Capacitance per leg



Dimensions in inch (mm)



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How to contact us

US HEADQUARTERS

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162
Tel: (800) TAITRON (800) 824-8766 (661) 257-6060
Fax: (800) TAITFAX (800) 824-8329 (661) 257-6415
Email: taitron@taitroncomponents.com
Http://www.taitroncomponents.com

TAITRON COMPONENTS MEXICO, S.A .DE C.V.

BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO C.P. 42970 MEXICO
Tel: +52-55-5560-1519
Fax: +52-55-5560-2190

TAITRON COMPONENTS INCORPORATED REPRESENTAÇÕES DO BRASIL LTDA

RUA DOMINGOS DE MORAIS, 2777, 2.ANDAR, SALA 24 SAÚDE - SÃO PAULO-SP 04035-001 BRAZIL
Tel: +55-11-5574-7949
Fax: +55-11-5572-0052

TAITRON COMPONENTS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE

METROBANK PLAZA, 1160 WEST YAN' AN ROAD, SUITE 1503, SHANGHAI, 200052, CHINA
Tel: +86-21-5424-9942
Fax: +86-21-5424-9931