

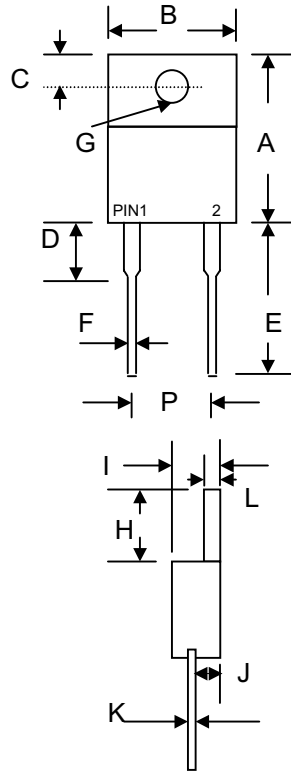
Data Sheet 4833, Rev. -

Features

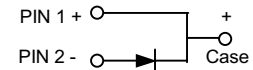
- Glass Passivated Die Construction
- Super-Fast Switching for High Efficiency
- High Current Capability
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-O
- Green Products in Compliance with the RoHS Directive

Mechanical Data

- Case: TO-220A Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 2.24 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



TO-220A				
Dim	Min	Max	Min	Max
A	14.9	15.10	0.587	0.595
B	—	10.50	—	0.413
C	2.62	2.87	0.103	0.113
D	3.56	4.06	0.140	0.160
E	13.46	14.22	0.530	0.560
F	0.68	0.94	0.027	0.037
G	3.74 ϕ	3.91 ϕ	0.147 ϕ	0.154 ϕ
H	5.84	6.86	0.230	0.270
I	4.44	4.70	0.175	0.185
J	2.54	2.79	0.100	0.110
K	0.35	0.64	0.014	0.025
L	1.14	1.40	0.045	0.055
P	4.95	5.20	0.195	0.205
	In mm		In inch	



Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	ER 1000-G	ER 1001-G	ER 1001A-G	ER 1002-G	ER 1003-G	ER 1004-G	ER 1006-G	Unit
Peak Repetitive Reverse Voltage	V _{RRM}								
Working Peak Reverse Voltage	V _{RWM}	50	100	150	200	300	400	600	V
DC Blocking Voltage	V _R								
RMS Reverse Voltage	V _{R(RMS)}	35	70	105	140	210	280	420	V
Average Rectified Output Current @T _C = 105°C	I _O	10							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150							A
Forward Voltage @I _F = 10A	V _{FM}		0.95			1.3		1.7	V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	I _{RM}	10 500							μA
Reverse Recovery Time (Note 1)	t _{rr}		35			50			nS
Typical Junction Capacitance (Note 2)	C _j		70			50			pF
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150							°C

Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

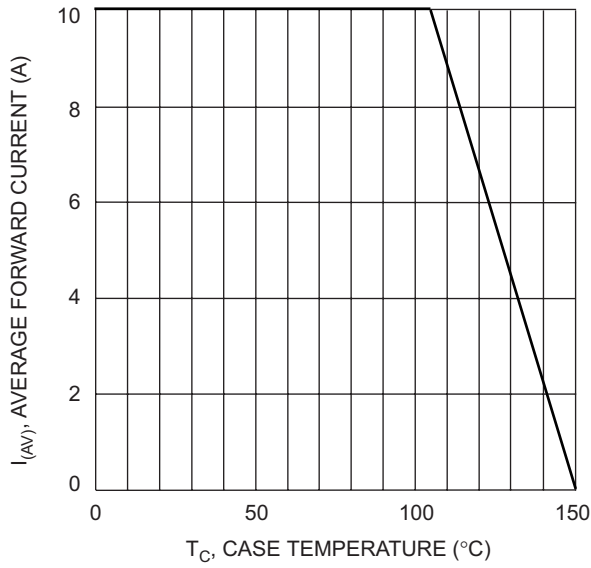


Fig. 1 Forward Current Derating Curve

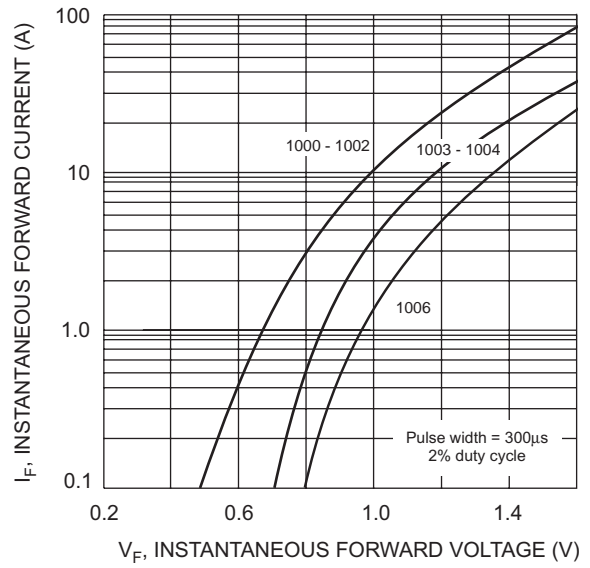


Fig. 2 Typical Forward Characteristics

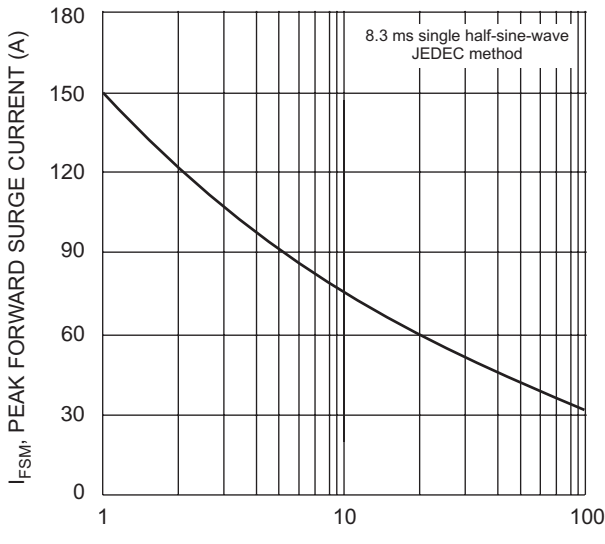


Fig. 3 Max Non-Repetitive Surge Current

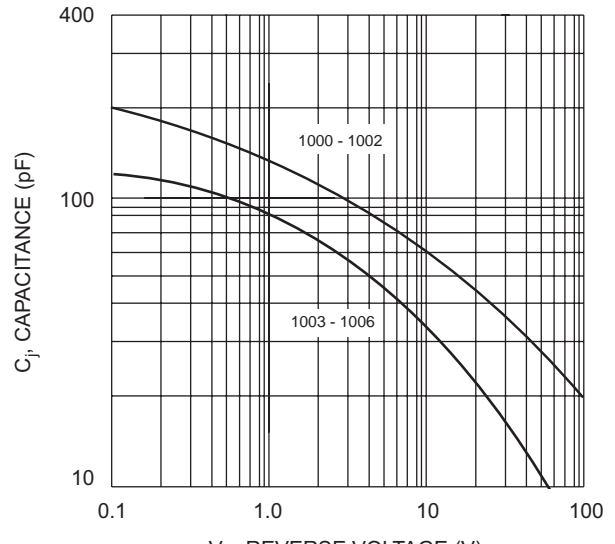


Fig. 4 Typical Junction Capacitance

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