



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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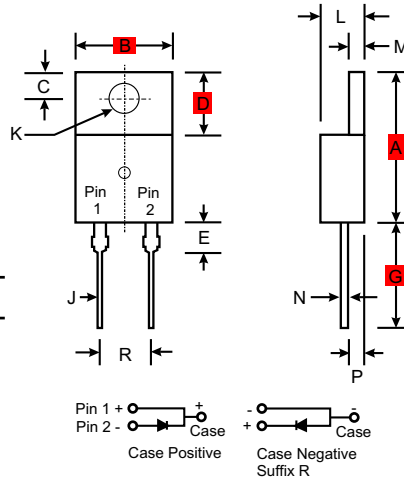


Features

- Low Reverse Recovery Time
- Low Leakage
- Low Forward Voltage Drop
- High Current Capability
- High Surge Capability
- Plastic Material - UL Flammability Rating 94V-0
- High Reliability

Mechanical Data

- Case: TO-220A, Molded Plastic
- Terminals: Plated Axial Leads, Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram at Right
- Approx. Weight: 2.24 grams
- Mounting Position: Any



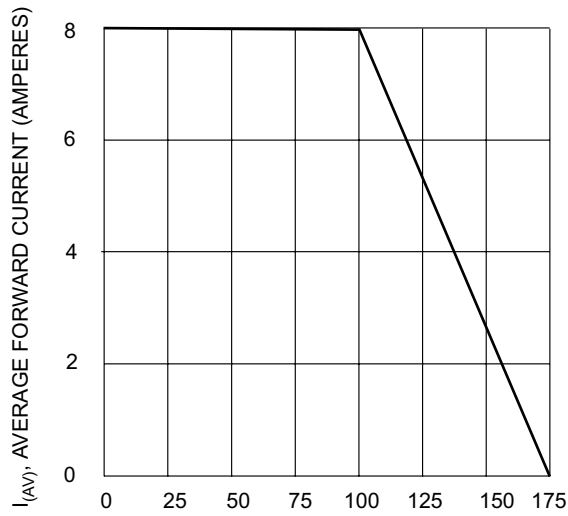
TO-220A		
Dim	Min	Max
A	14.22	15.88
B	9.65	10.67
C	2.54	3.43
D	5.84	6.86
E	—	6.25
G	12.70	14.73
H	2.29	2.79
J	0.51	1.14
K	3.53Ø	4.09Ø
L	3.56	4.83
M	1.14	1.40
N	0.30	0.64
P	2.03	2.92
R	4.83	5.33
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics

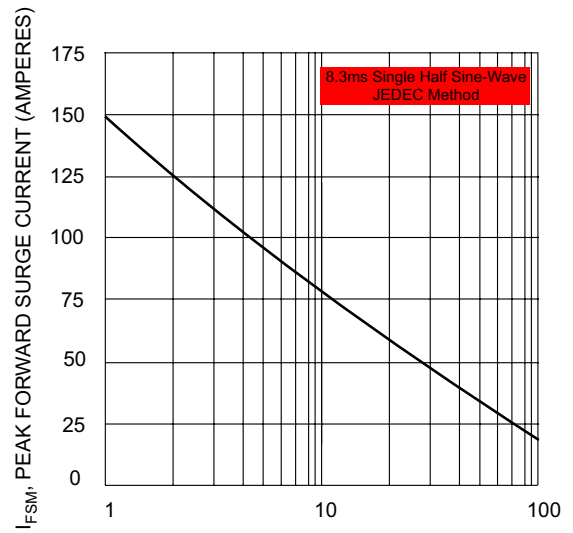
Ratings at 25° C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.

Characteristic	Symbol	FR801	FR802	FR803	FR804	FR805	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	V
Maximum DC Blocking voltage	V _{DC}	50	100	200	400	600	V
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length @ T _C = 100°C	I _(AV)	8.0					A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150					A
Maximum Instantaneous Forward Voltage @ 8.0A DC	V _F	1.3					V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ T _A = 25°C	I _R	10					µA
Maximum Full Load Reverse Current Full Cycle @ T _C = 100°C	I _R	150					µA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	150				250	ns
Typical Junction Capacitance (Note 2)	C _J	70					pF
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +175					°C

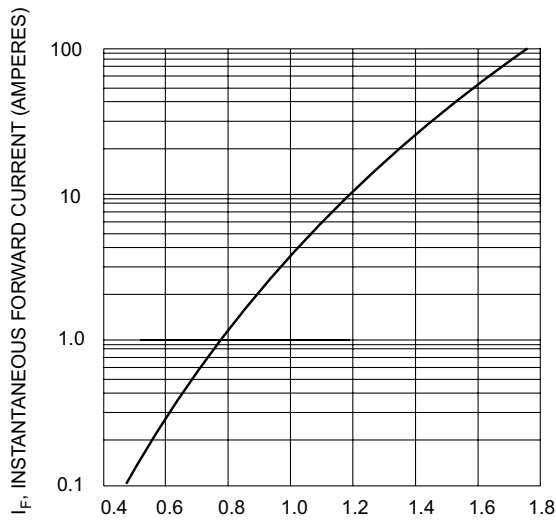
Notes: 1. Reverse Recovery Test Conditions: I_F = 0.5 A, I_R = 1.0 A, I_{RR} = 0.25 A
2. Measured at 1.0MHz and applied reverse voltage of 4.0V.



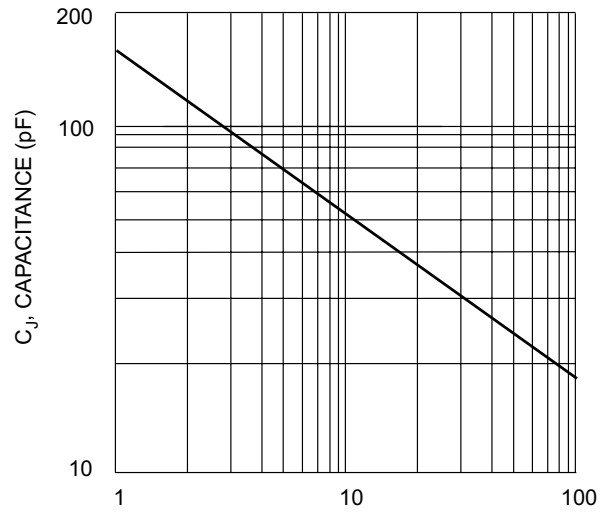
T_C , CASE TEMPERATURE (°C)
Fig. 1, Forward Current Derating Curve



NUMBER OF CYCLES AT 60 Hz
Fig. 2, Maximum Non-Repetitive Surge Current



V_F , INSTANTANEOUS FORWARD VOLTAGE (VOLTS)
Fig. 3, Typical Instantaneous Forward Characteristics



V_R , REVERSE VOLTAGE (VOLTS)
Fig. 4, Typical Junction Capacitance

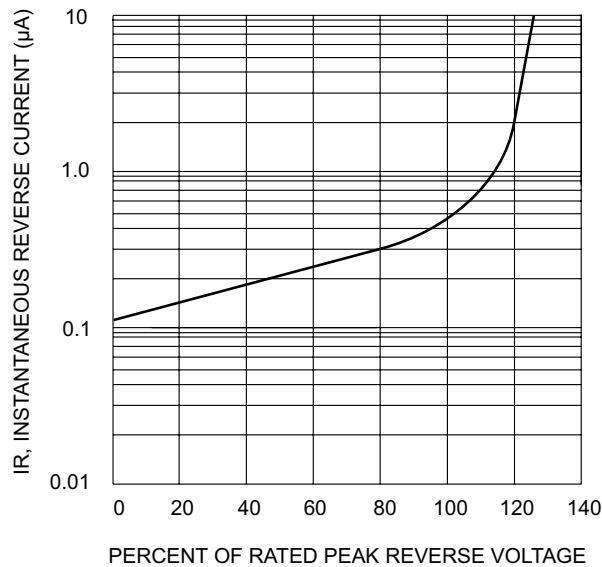


Fig. 5, Typical Reverse Characteristics