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!

Contact us

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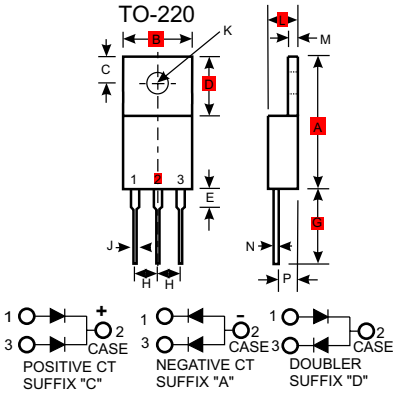
SF161 - SF164

16A SUPER-FAST RECOVERY RECTIFIER

Features

- Low Leakage
- Low Forward Voltage Drop
- High Current Capability
- Super-fast Switching Speed < 35ns
- Plastic Material - UL Flammability Rating 94V-0
- Good for 200KHz Power Supplier



TO-220AB		
Dim	**Min**	**Max**
A	14.22	15.88
B	9.65	10.67
C	2.54	3.43
D	5.84	6.86
E	—	6.35
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
Q	4.83	5.33
All Dimensions in mm		

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Axial Leads, Solderable per MIL-STD-202, Method 208
- Polarity: Color Band Denotes Cathode
- Approx. Weight: 2.24 grams
- Mounting Position: Any

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	SF161	SF162	SF163	SF164	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	V
Maximum Average Forward Rectified Current Total Package @ T_C = 125°C	$I_{(AV)}$	16				A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	125				A
Maximum Instantaneous Forward Voltage at 8.0A DC per leg	V_F	0.975				V
Maximum DC Reverse Current @ T_A = 25°C at Rated DC Blocking Voltage @ T_A = 100°C	I_R	10 150				μA
Typical Thermal Resistance Junction to Case	$R_{\theta JC}$	2				K/W
Maximum Reverse Recovery Time (Note 1)	T_{rr}	35				ns
Typical Junction Capacitance (Note 2)	C_J	75				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}=0.25A.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V.

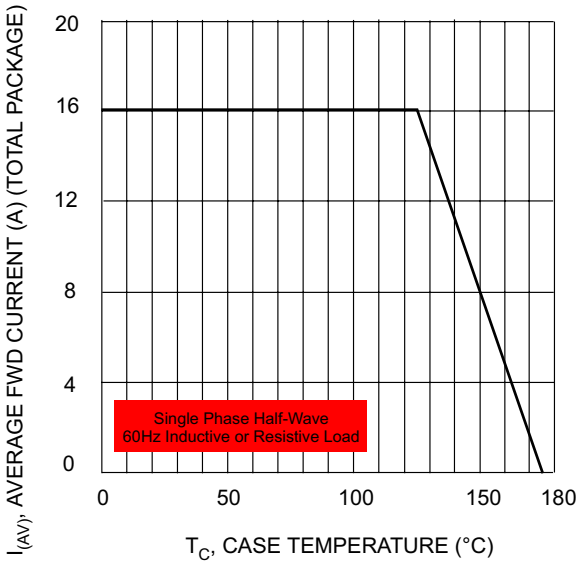


Fig. 1, Forward Current Derating Curve

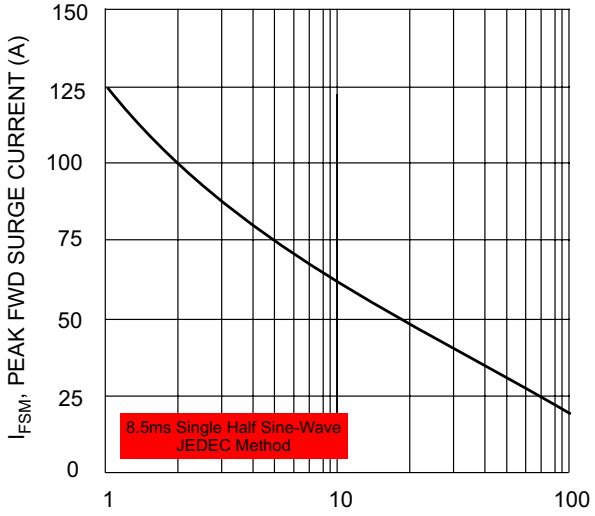


Fig. 2, Maximum Non-Repetitive Surge Current

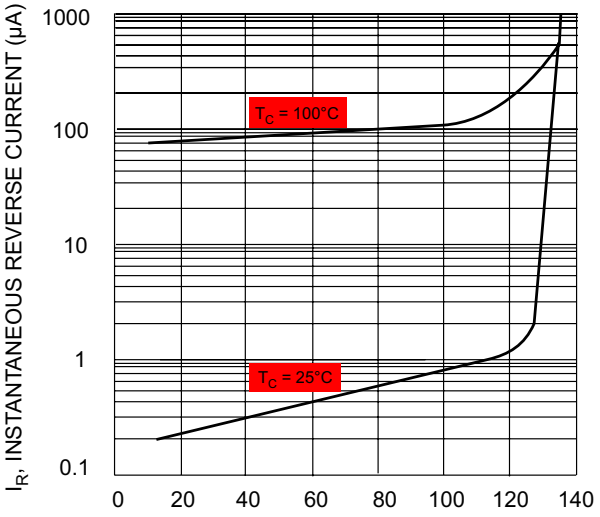


Fig. 3, Typical Reverse Characteristics

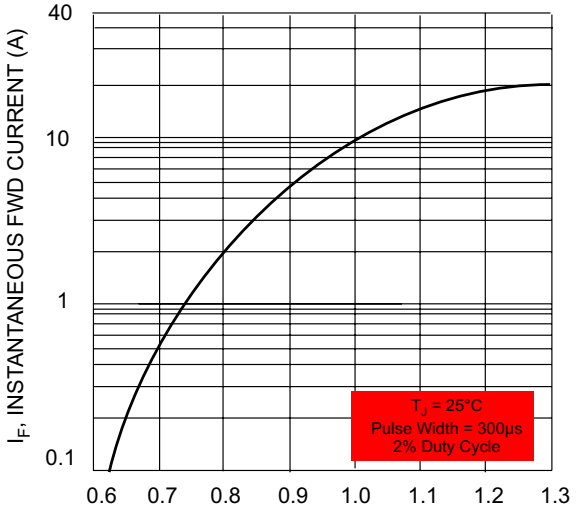


Fig. 4, Typ. Instantaneous Fwd Characteristics

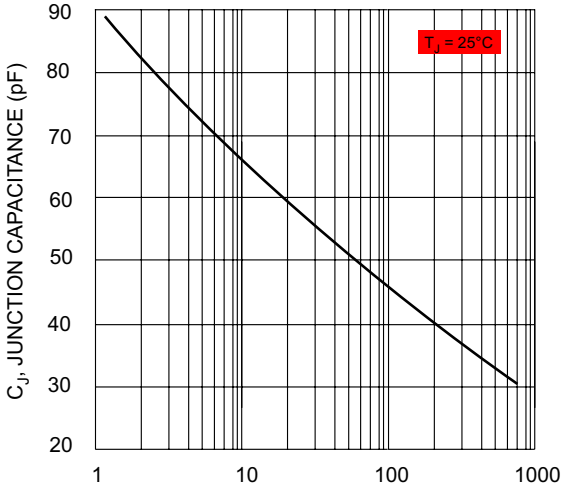


Fig. 5, Typical Junction Capacitance