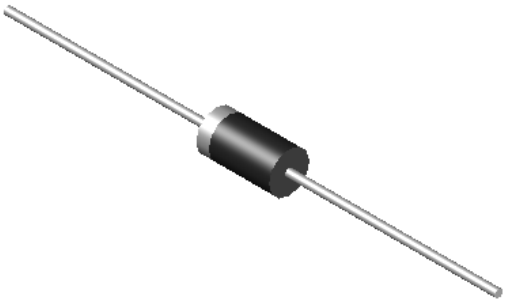
SF11G THRU SF18G

1.0AMP Surface Mount Super Fast Recovery Rectifier

1. Features

- Glass passivated chip junction
- Low leakage current
- Low forward voltage drop.
- High current capability.
- High reliability.
- Super Fast reverse recovery time.
- Meets MSL level 1, per J-STD-020.

DO-41



2. Mechanical Data

- Case:Molded Plastic,DO-41 .
- Epoxy:UL 94V-0 rate flame retardant.
- Terminals:Plated Leads Solderable per MIL-STD-750,Method-2026.
- Marking:marked on body.

3. Maximum Ratings and Electrical Characteristics

Electrical Characteristics Rating at 25℃ ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	SF11G	SF12G	SF13G	SF14G	SF15G	SF16G	SF18G	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	V
Average Rectified Output Current @T_L=90 °C	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms @Tj=25°C Single half sine-wave superimposed @Tj=125°C on rated load (JEDEC Method)	I_{FSM}	35 28							A
Peak Forward Surge Current 1.0ms @Tj=25°C Single half sine-wave superimposed @Tj=125°C on rated load (JEDEC Method)	I_{FSM}	70 56							A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	5.08							A^2S
Maximum Instantaneous Forward Voltage @IF=1A	V_{FM}	0.95				1.3		1.7	V
Maximum DC reverse current @Tj=25°C at rated DC blocking voltage @Tj=125°C	I_R	5.0 100							uA
Maximum Reverse Recovery Time （Note 1）	T_{RR}	35							ns
Typical Junction Capacitance （Note 2）	Cj	20				7			pF
Typical Thermal Resistance	$R_{\theta JA}$	65							℃/W
	$R_{\theta JL}$	15							
	$R_{\theta JC}$	10							
Operating Temperature Range	Tj	-55 to+150							℃
Storage Temperature Range	T_{STG}	-55 to+150							℃

Note：

1. Reverse RecoveryTest Conditions:IF=0.5A,IR=1.0A,IRR=0.25A.
2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

4. Rating And Characteristic Curves

Fig. 1 Forward Current Derating Curve

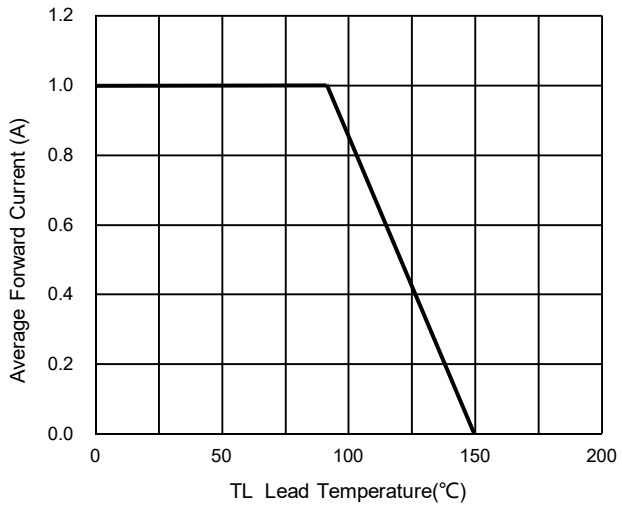


Fig. 2 Typical Forward Characteristics

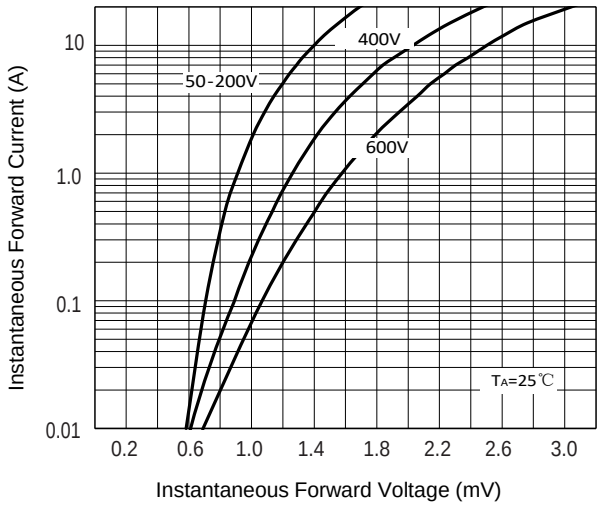


Fig. 3 Forward Surge Current Capability

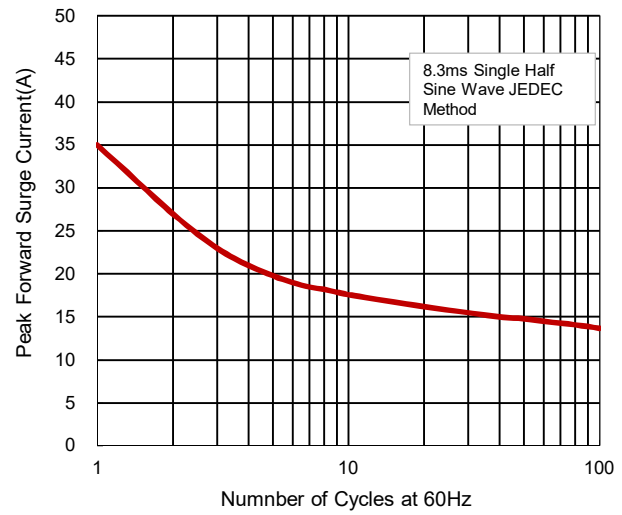
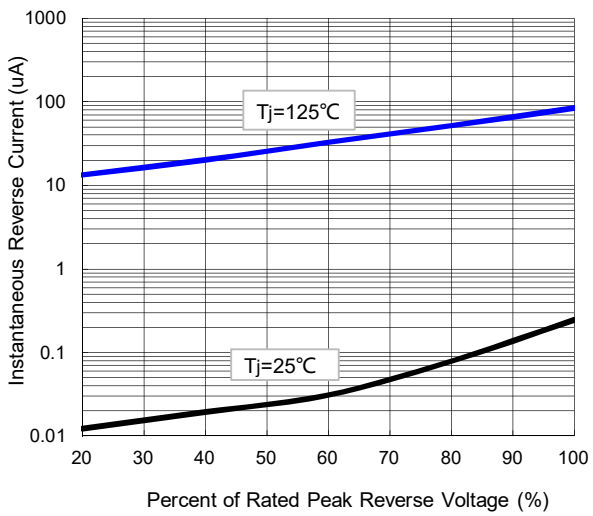
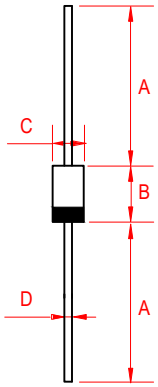


Fig.4 Typical Reverse Characteristics

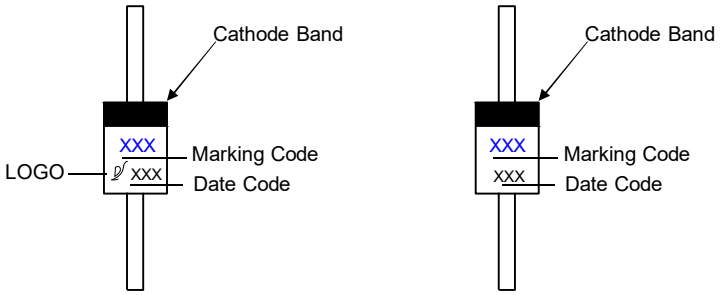


5. Dimensions



Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	1.0	/	25.4	/
B	/	0.205	/	5.2
C	0.079	0.118	2.0	3.0
D	0.024	0.031	0.6	0.8

6. Part Marking System



7. Package Information

Package	Packing
DO-41	5000 / Tape & Reel

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