



Central Plate
Electronics Co.,Ltd.

SF11G THRU SF18G

SUPER FAST RECTIFIER

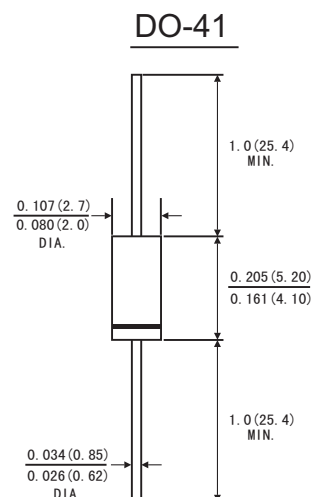
Reverse Voltage: 50 to 600 Volts Forward Current:1.0Amperes

FEATURES

- Glass passivated cavity-free junction
- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Lead (Pb)-free component
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC
- High temperature soldering guaranteed:260°C/10 seconds at terminals

MECHANICAL DATA

- Case: JEDEC DO-41 molded plastic body
- TerMINals: Plated axial leads, solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.012ounce, 0.33 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS Dimensions in inches and (millimeters)

(Rating at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,60HZ,resistive or inductive load. For capacitive load,derate current by 20%.)

	Symbols	SF 11G	SF 12G	SF 13G	SF 14G	SF 15G	SF 16G	SF 17G	SF 18G	Units	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	500	600	Volts	
Maximum RMS Voltage	V _{RMS}	35	70	105	140	210	280	350	420	Volts	
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	300	400	500	600	Volts	
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length@T _A =55°C	I _(AV)	1.0								Amps	
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30								Amps	
Maximum Instantaneous Forward Voltage at 1.0 A	V _F	0.95			1.3			1.7		Volts	
Maximum DC Reverse Current At Rated DC Blocking Voltage	T _A =25°C	5.0								μ A	
	T _A =125°C	100									
Maximum Reverse Recovery Time(Note1)	T _{rr}	35								ns	
Typical Junction Capacitance(Note2)	C _J	30				15					pF
Typical Thermal Resistance (NOTE3)	R _{θ JA}	70								°C/W	
Operating Junction Temperature Range	T _J	-65 to+150								°C	
Storage Temperature Range	T _{STG}	-65 to+150								°C	

Note: 1.Reverse Recovery Test conditions: I_F=0.5A,I_R=1.0A,I_{RR}=0.25A.

2.Measured at 1MHz and applied reverse voltage of 4.0 Volts.

3. Mount on 5mmX5mm Cu-Pad on PCB.



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RATINGS AND CHARACTERISTIC CURVES SF11G THRU SF18G

FIG.1-MAXIMUM AVERAGE FORWARD CURRENT DERATING

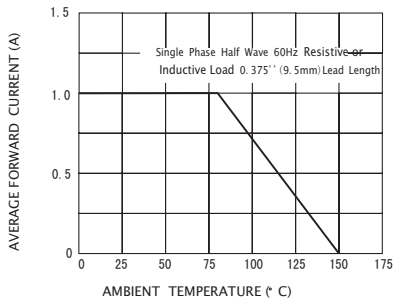


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

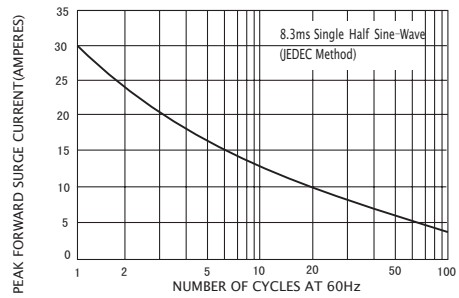


FIG.3-TYPICAL FORWARD CHARACTERISTICS

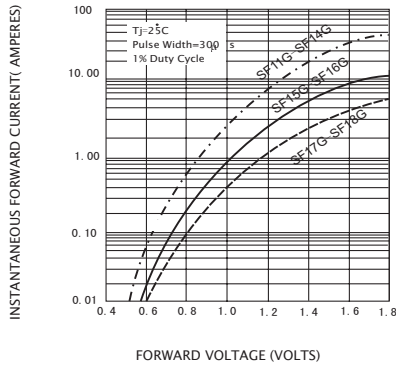


FIG.4-TYPICAL REVERSE CHARACTERISTICS

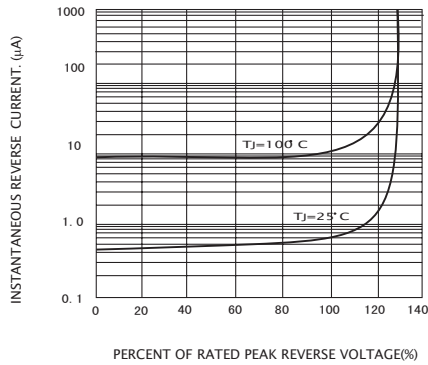


FIG.5-TYPICAL JUNCTION CAPACITANCE

