Elektronische Bauelemente

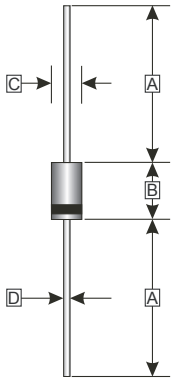
SF11G ~ SF15G

VOLTAGE 50 ~ 600 V

1 A, Glass Passivated Super Fast Rectifiers

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

DO-41



REF.	Millimeter	
	Min.	Max.
A	25.4 (TYP)	
B	4.10	5.21
C	2.00	2.72
D	0.70	0.90

FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

PACKAGING INFORMATION

- Glass Passivated
- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 0.3400 grams (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETERS	SYMBOL	PART NUMBERS					UNITS	TESTING CONDITIONS
		SF11G	SF12G	SF13G	SF14G	SF15G		
Recurrent Reverse Voltage (Max.)	V_{RRM}	50	100	200	400	600	V	
RMS Voltage (Max.)	V_{RMS}	35	70	140	280	420	V	
DC Blocking Voltage (Max.)	V_{DC}	50	100	200	400	600	V	
Instantaneous Forward Voltage (Max.)	V_F	0.95			1.30	1.70	V	I_F = 1 A
Average Forward Rectified Current (Max.)	I_O	1.0					A	0.375" (9.5mm) lead length @ T_A = 55°C
Peak Forward Surge Current	I_{FSM}	30					A	8.3ms single half sine-wave superimposed on rated load (JEDEC method)
DC Reverse Current (Max.)	I_R	5.0					μA	$V_R = V_{RRM}$, T_A=25°C
		50						V_R=V_{RRM}, T_A=100°C
Reverse Recovery Time (Max.)	T_{RR}	35					nS	I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
Junction Capacitance (Typ.)	C_J	50					pF	f=1MHz and applied 4V DC reverse voltage
Storage Temperature Range	T_{STG}	-65 ~ 150					°C	

Elektronische Bauelemente

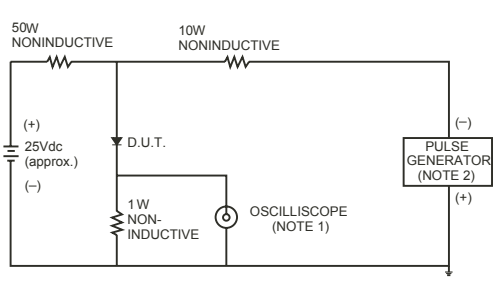
SF11G ~ SF15G

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1 A, Glass Passivated Super Fast Rectifiers

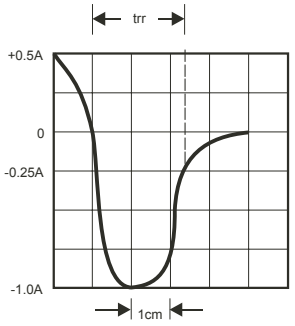
RATINGS AND CHARACTERISTIC CURVES (SF11G THRU SF15G)

FIG.1- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.



SET TIME BASE FOR

50 / 10ns / cm

FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

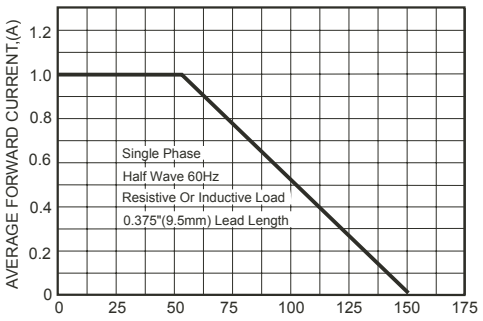


FIG.3-TYPICAL FORWARD CHARACTERISTICS

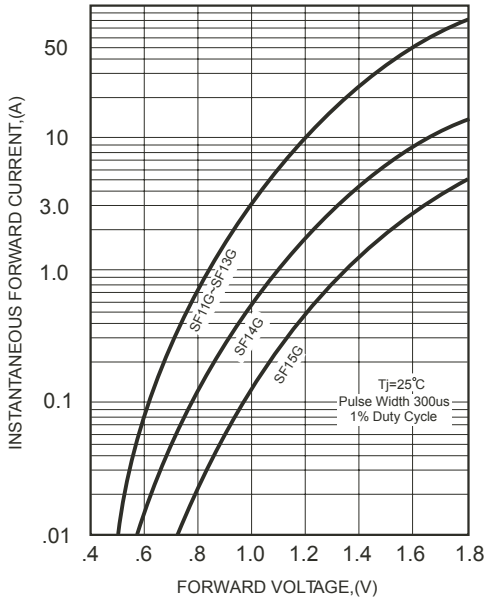


FIG.4-TYPICAL REVERSE CHARACTERISTICS

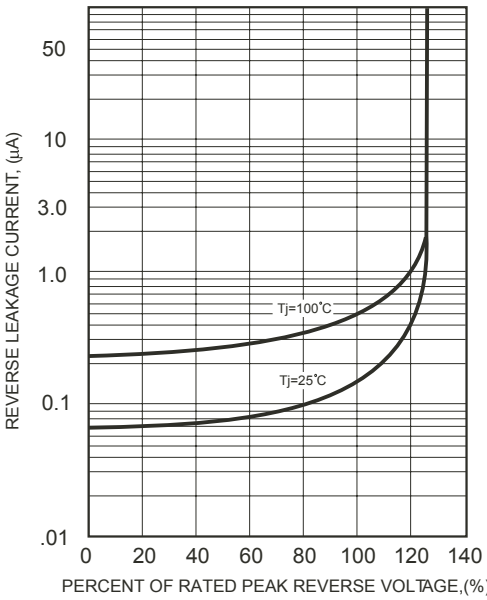


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

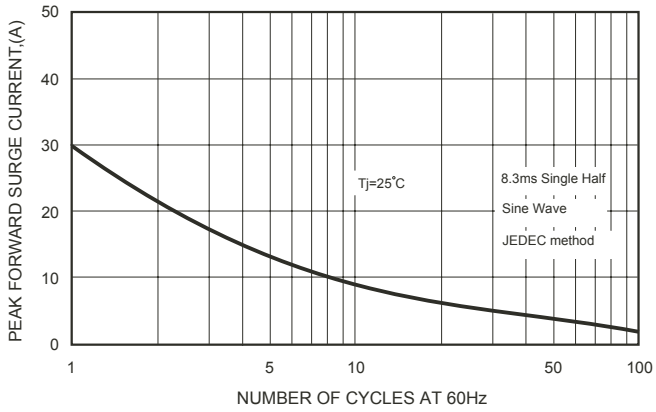


FIG.6-TYPICAL JUNCTION CAPACITANCE

