SF56G-R6

5.0AMPS. SUPER FAST RECTIFIERS

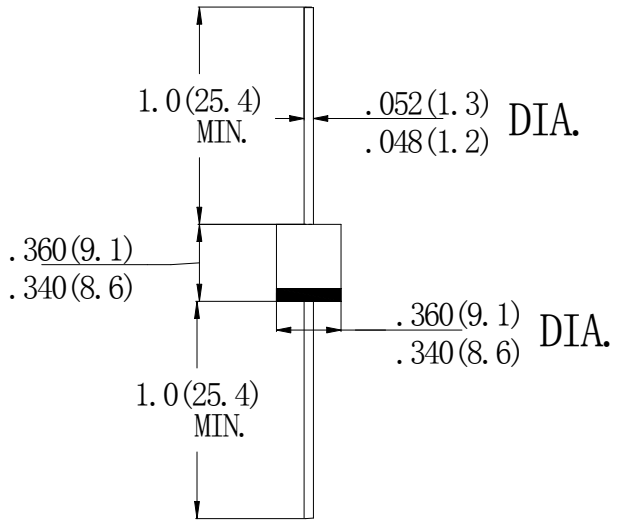
FEATURE

. High current capability
. Low forward voltage drop
. Low power loss, high efficiency
. High surge capability
. High temperature soldering guaranteed
260°C /10sec/ 0.375" lead length at 5 lbs tension
. Super fast recovery time for high efficiency.

MECHANICAL DATA

. Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
. Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
. Polarity: color band denotes cathode
. Mounting position: any

R-6



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Type Number	SYMBOL	SF56G-R6	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	400	V
Maximum RMS Voltage	V_{RMS}	280	V
Maximum DC blocking Voltage	V_{DC}	400	V
Maximum Average Forward Rectified Current .375"(9.5mm) lead length at T_L=90°C	$I_{F(AV)}$	5.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150.0	A
Maximum Instantaneous forward Voltage at 5.0A DC	V_F	1.3	V
Maximum DC Reverse Current @T_J=25°C at rated DC blocking voltage @T_J=100°C	I_R	5.0 100.0	μA
Maximum Reverse Recovery Time (Note 1)	t_{rr}	35	nS
Typical Junction Capacitance (Note 2)	C_J	90	pF
Typical Thermal Resistance (Note 3)	$R_{(JA)}$	15	°C/W
Storage Temperature	T_{STG}	-55 to +150	°C
Operation Junction Temperature	T_J	-55 to +150	°C

Note:
1. Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 0.375"（9.5mm）lead length, vertical P.C.Board Mounted.

RATING AND CHARACTERISTIC CURVES (SF56G-R6)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

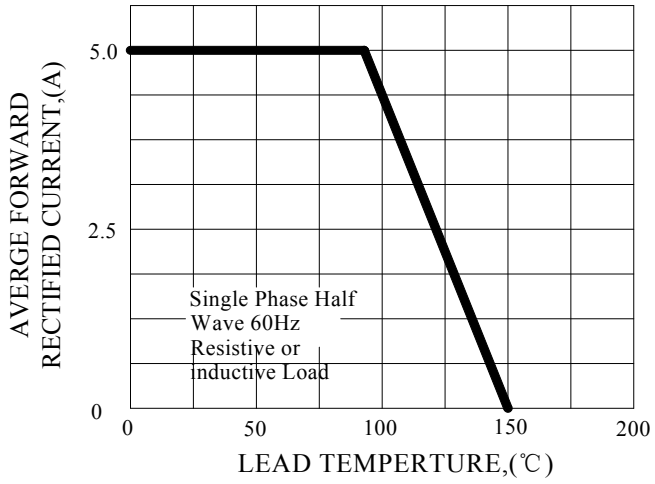


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

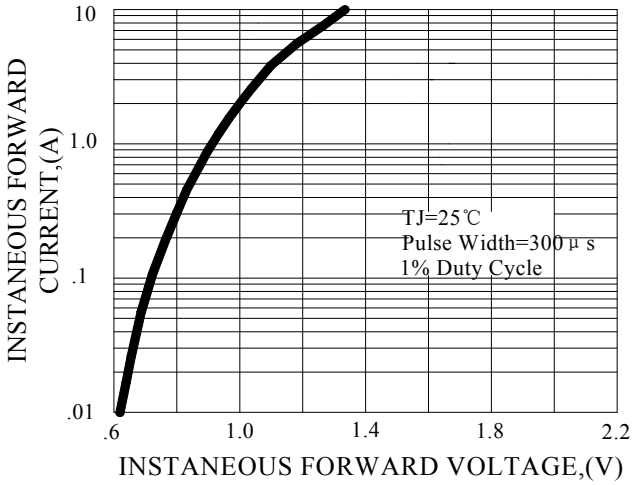


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

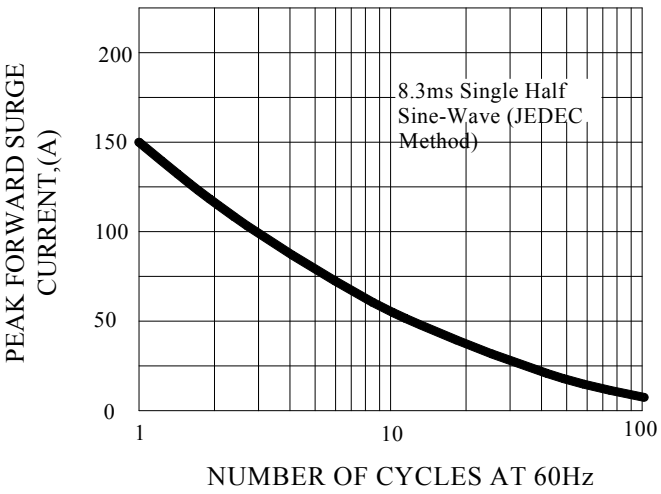


FIG.4-TYPICAL REVERSE CHARACTERISTICS

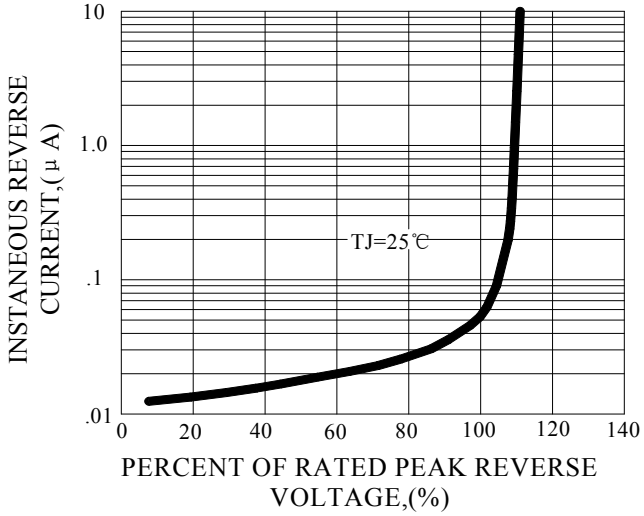
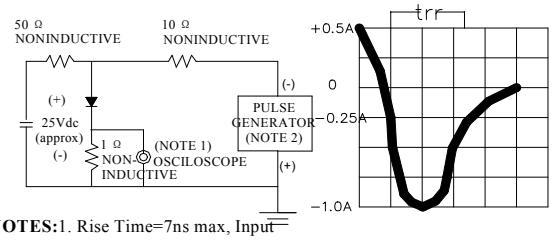


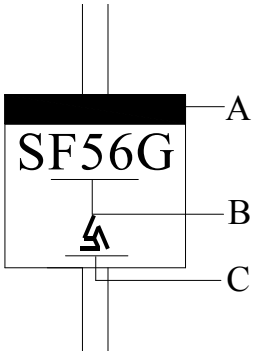
FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERSITIC



NOTES:1. Rise Time=7ns max, Input Impedance= 1 megohm.22pF.
2. Rise Time=10ns max,
Souce Impedance= 50 ohms.

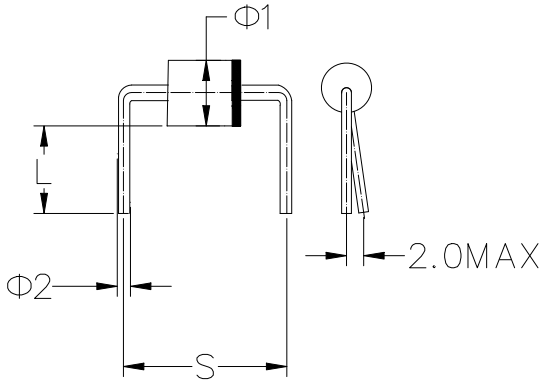
Marking and packaging illustration

1、Marking



SYMBOL	Explanation
A	Color Band Denotes Cathode
B	Product Name
C	Trademark

2、Bending



S	17.5±0.5	Φ1	8.9
L	3.5±0.3	Φ2	1.28

3、Packaging（B/P）

OUTLINE	BOX（PCS）
R-6	400