SF21 THRU SF28

2.0AMP. Super Fast Recitifiers

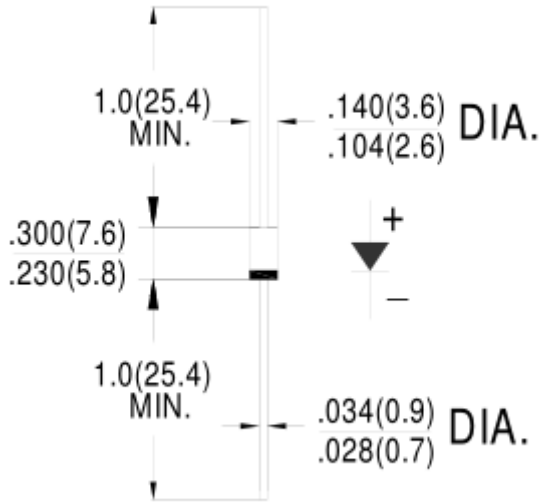
FEATURE

.High current capability,
.Low forward voltage drop
.Low power loss, high efficiency
.High surge capability
.High temperature soldering guaranteed
260 ℃ /1 0sec/0.375" lead length at 5 lbs tension
Superfast recovery time for high efficiency.

MECHANICAL DATA

.Case: Molded plastic
.Epoxy: UL94V-0 rate flame retardant
.Lead: MIL-STD- 202E, Method 208 guaranteed
.Polarity:Color band denotes cathode end
.Packaging:12mm tape per EIA STD RS-481
.Mounting position: Any

DO-15



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25 ℃, unless otherwise stated)

Type Number	SYMBOL	SF21	SF22	SF23	SF24	SF25	SF26	SF27	SF28	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	500	100	150	200	300	400	500	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	350	420	V
Maximum DC blocking Voltage	V_{DC}	500	100	150	200	300	400	500	600	V
Maximum Average Forward Rectified Current .375"(9.5mm)lead length at TL =55 ℃	$I_{F(AV)}$	2.0								A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50.0								A
Maximum Forward Voltage at 2.0A DC	V_F	0.95				1.3		1.7		V
Maximum DC Reverse Current Ta =25 ℃ at rated DC blocking voltage Ta =125 ℃	I_R	5.0 100.0								μA
Maximum Reverse Recovery Time (Note 1)	t_{rr}	35								ns
Typical Junction Capacitance (Note 2)	C_J	60						30		pF
Typical Thermal Resistance (Note 3)	$R_{(JA)}$	75								℃/W
Storage Temperature	T_{STG}	-55 to +150								℃
Operation Junction Temperature	T_J	-55 to +125								℃

Note:

1. Reverse Recovery test Condition: If=0.5A,IR=1.0A,IRR=0.25A;
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. P.C.B.Mounted on0.2×0.2”(5.0×5.0mm)[0.013mm thick]Copper Pad Area.

RATING AND CHARACTERISTIC CURVES (SF21 THRU SF28)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

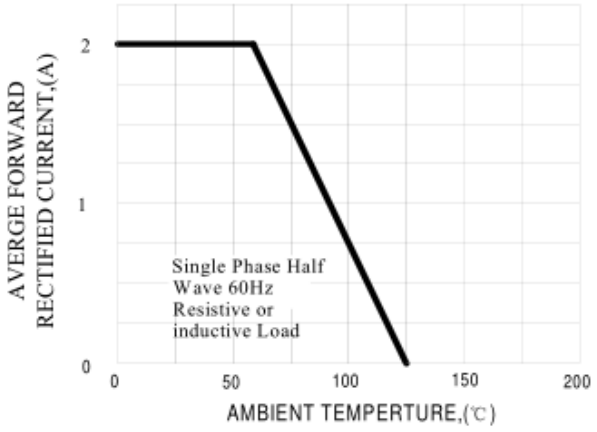


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

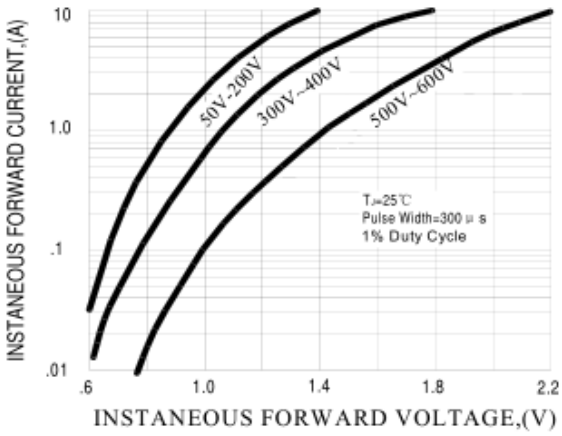


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

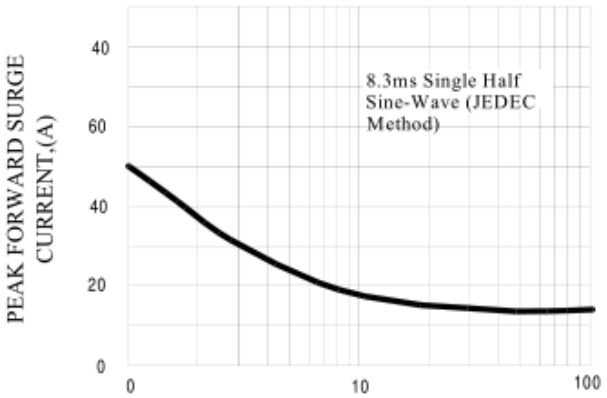


FIG.4-TYPICAL REVERSE CHARACTERISTICS

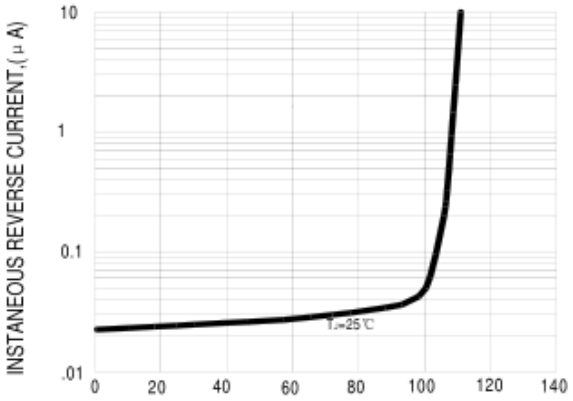
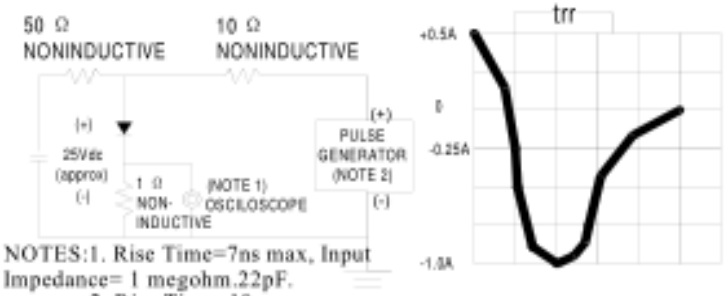


FIG.6-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERSITIC



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