SF21 THRU SF28

SUPERFAST RECOVERY RECTIFIER

GROWCHILD ELECTRONICS™

REVERSE VOLTAGE: **50 to 600 VOLTS**

FORWARD CURRENT: **2.0 AMPERE**

http://www.njzrg.com

FEATURES

· High surge capability

· Low forward voltage, high current capability

· Hermetically sealed

· Superfast recovery times

· Exceeds environmental standards of MIL-S-19500/228

· Low leakage.

MECHANICAL DATA

Case: Molded plastic, DO-15

Epoxy: UL 94V-O rate flame retardant

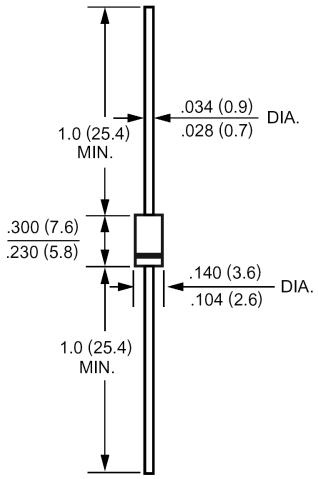
Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed

Polarity: Color band denotes cathode end

Mounting position: Any

Weight: 0.015ounce, 0.4gram

DO-15



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60H_Z, resistive or inductive load.

For capacitive load, derate current by 20%.

	Symbols	*SF21*	*SF22*	*SF23*	*SF24*	*SF25*	*SF26*	*SF28*	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	**Volts**
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	**Volts**
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	**Volts**
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at T_A=55℃	$I_{(AV)}$	2.0							**Amp**
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50							**Amp**
Maximum Forward Voltage at 2.0A DC and 25℃	V_F	0.95				1.25		1.7	**Volts**
Maximum Reverse Current at T_A=25℃ / **at Rated DC Blocking Voltage T_A=100℃**	I_R	5.0 / 500							**uAmp**
Typical Junction Capacitance (Note 1)	C_J	60				30			**pF**
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							**℃/W**
Maximum Reverse Recovery Time (Note 3)	T_{RR}	35						50	**nS**
Operating Junction Temperature Range	T_J	-55 to +125							**℃**
Storage Temperature Range	Tstg	-55 to +150							**℃**

NOTES:

1- Measured at 1 MH_Z and applied reverse voltage of 4.0 VDC.

2- Thermal Resistance from Junction to Ambient 0.375"(9.5mm) lead length P.C.B. Mounted.

3- Reverse Recovery Test Conditions：I_F=.5A，I_R=1A，I_{RR}=.25A.

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RATINGS AND CHARACTERISTIC CURVES

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

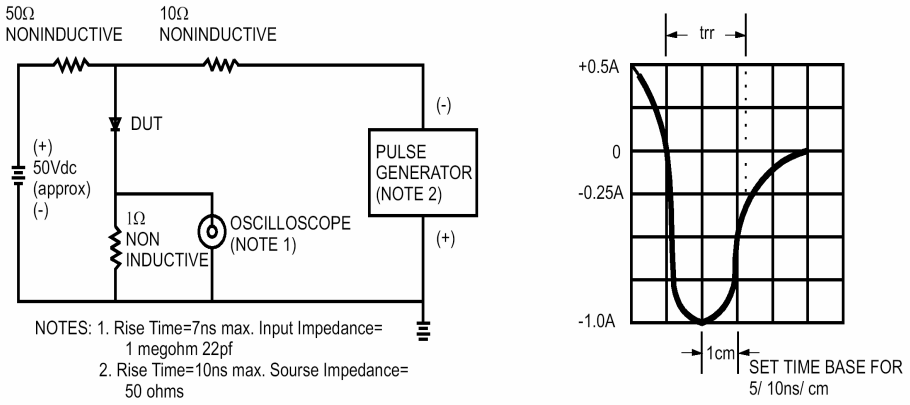

FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

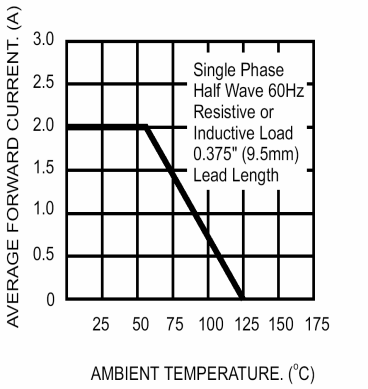

FIG.3- TYPICAL REVERSE CHARACTERISTICS

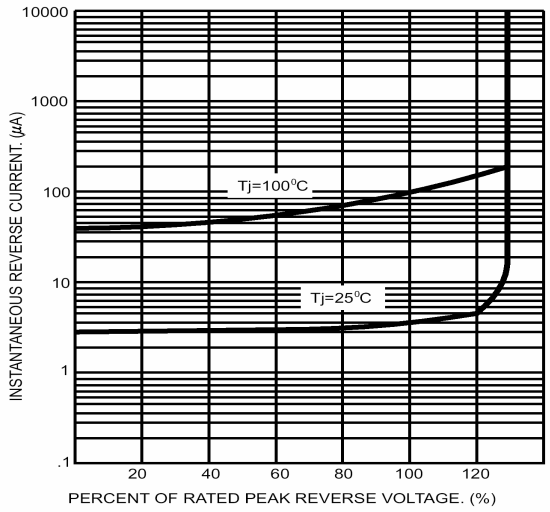

FIG.4- TYPICAL FORWARD CHARACTERISTICS

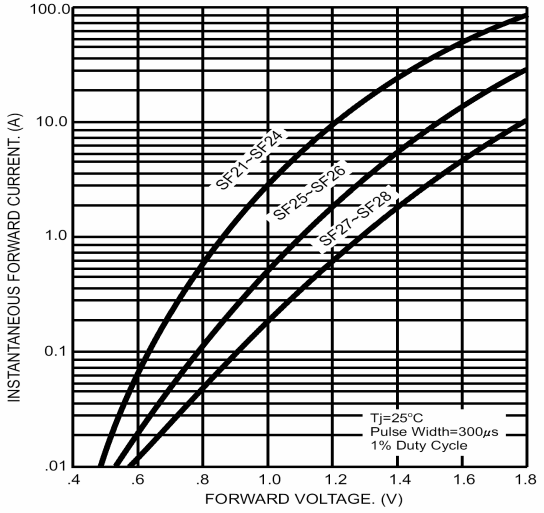

FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

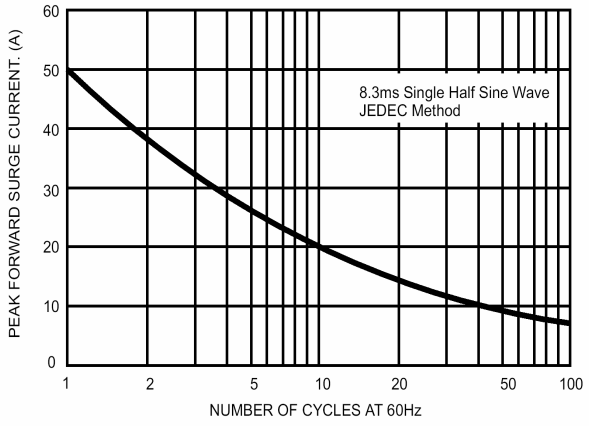

FIG.6- TYPICAL JUNCTION CAPACITANCE