

SF21 THRU SF28

2.0 AMP. Super Fast Plastic silicon Rectifiers

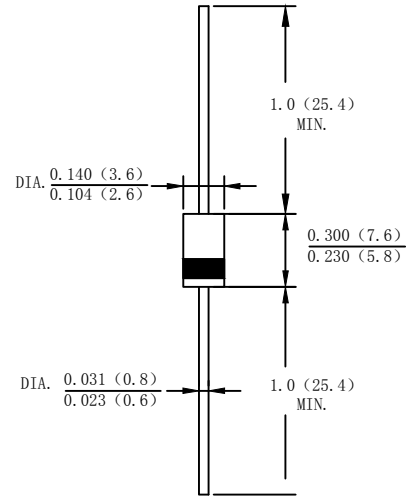
Features

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

Mechanical Data

- Case: Molded plastic DO-15
- Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band dented cathode end
- Mounting Position: Any
- Making: Type Number
- Lead Free: For RoHS/Lead Free Version

DO-15



Maximum Ratings and Electrical Characteristics

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%

Type Number	SYMBOL	SF21	SF22	SF23	SF24	SF25	SF26	SF28	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RM}	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	V
Average Rectified Output Current (Note 1) @ $T_L=100^\circ\text{C}$	$I_{F(AV)}$	2.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							A
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	10.375							A^2s
Forward Voltage @ $I_F=2.0\text{A}$	V_{FM}	0.95			1.25		1.7		V
Peak Reverse Current @ $T_A=25^\circ\text{C}$	I_R	5.0							uA
At Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$		100							
Maximum Reverse Recovery Time (Note 2)	T_{RR}	35							nS
Typical Junction Capacitance (Note 3)	C_j	40			30				pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	25							$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_j	-55 to + 125							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to + 150							$^\circ\text{C}$

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $IRR=0.25\text{A}$

3. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

FIG. 1 – FORWARD CURRENT DERATING CURVE

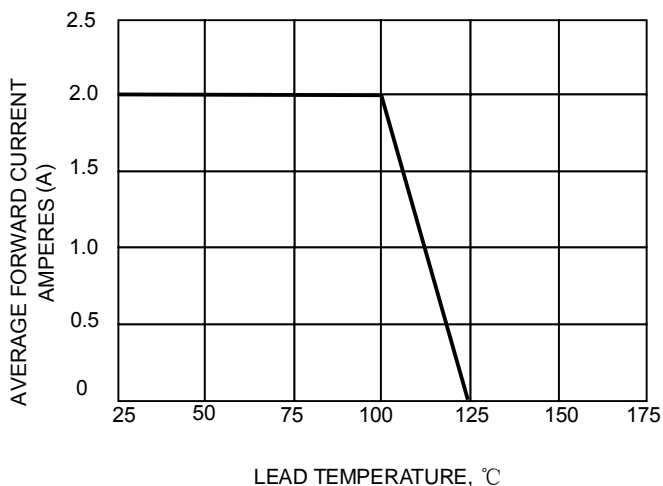


FIG.2-TYPICAL FORWARD CHARACTERISTICS

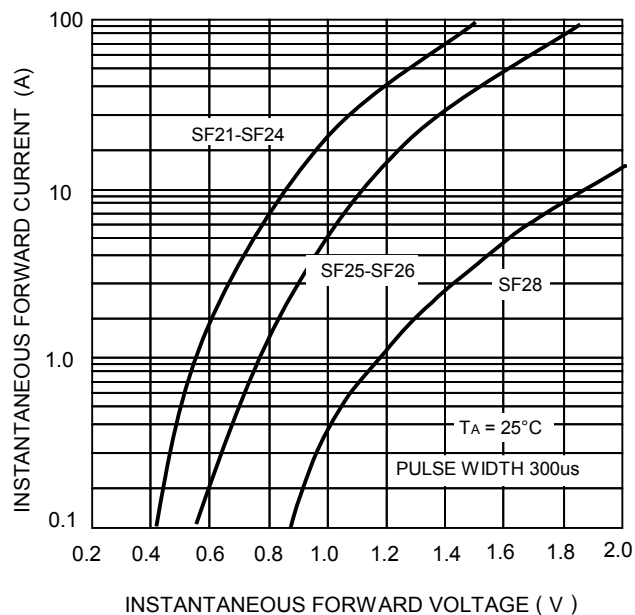


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

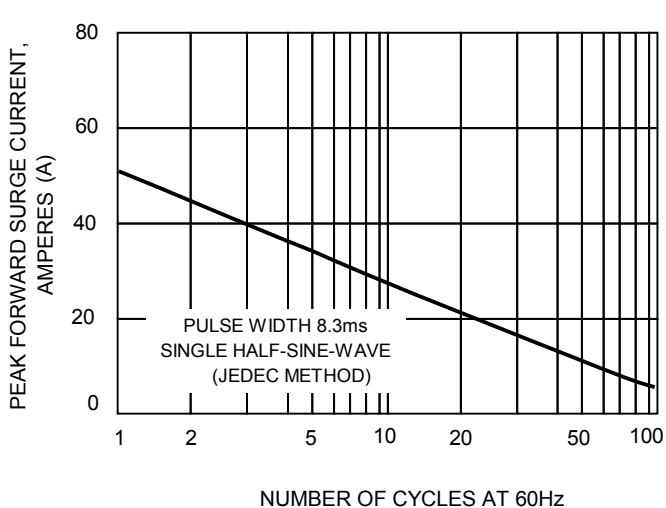
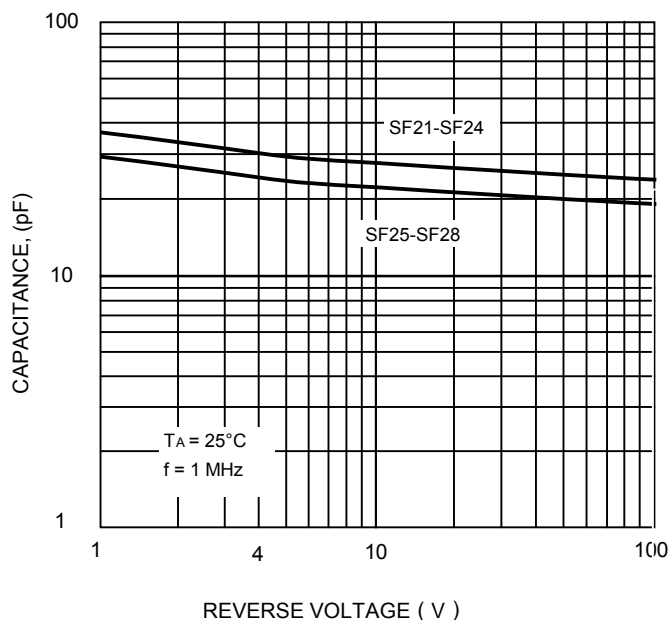


FIG.4 – TYPICAL JUNCTION CAPACITANCE



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