

# SF21 THRU SF28

## 2.0 AMP. Super Fast Plastic silicon Rectifiers

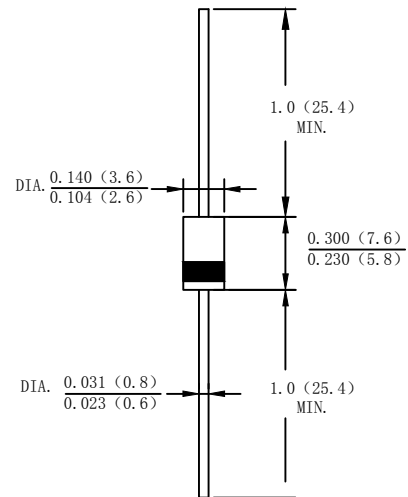
### Features

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

### Mechanical Data

- Case: Moeded 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



Dimensions in inches and (millimeters)

### 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) @ $T_A=50^\circ C$	$I_o$	2.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50							A
Forward Voltage @ $I_F=2.0A$	$V_{FM}$	0.95			1.25		1.7		V
Peak Reverse Current @ $T_A=25^\circ C$	$I_R$	5.0							uA
At Rated DC Blocking Voltage @ $T_A=125^\circ C$		100							
Maximum Reverse Recovery Time (Note2)	$T_{RR}$	35							nS
Typical Junction Capacitance (Note 3)	$C_j$	40			30				pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	25							K/W
Operating Temperature Range	$T_j$	-55 to + 125							°C
Storage Temperature Range	$T_{STG}$	-55 to + 150							°C

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

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

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

FIG. 1 – FORWARD CURRENT DERATING CURVE

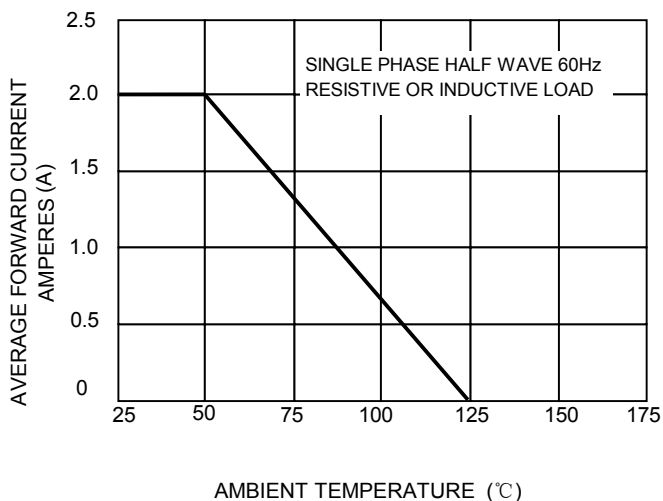


FIG.2-TYPICAL FORWARD CHARACTERISTICS

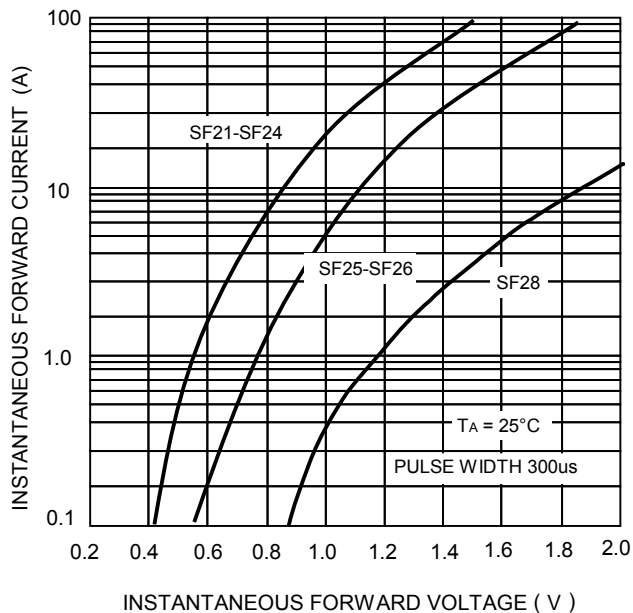


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

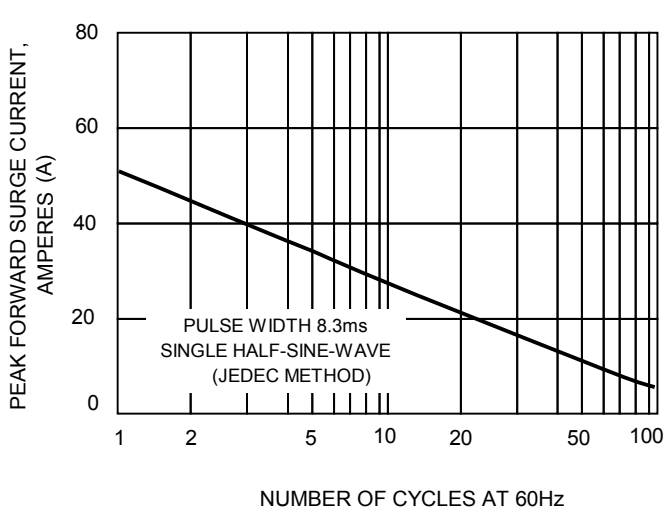


FIG.4 – TYPICAL JUNCTION CAPACITANCE

