Super Fast Rectifier Diodes

SF34G THRU SF39G 200 to 800V 3.0A

DO-27(DO-201AD)

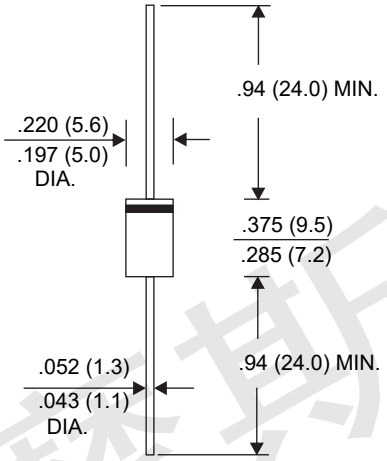
RoHS COMPLIANT

FEATURES

- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Fast Recovery times for high efficiency
- Plastic package has Underwriters Laboratory
- Flammability Classification 94V-O
- High temperature soldering : 260°C /10 seconds at terminals

MECHANICAL DATA

- Case: Molded plastic, DO-27 or DO-201AD
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number



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 or marks	Symbols	SF34G	SF36G	SF38G	SF39G	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	800	Volts
Maximum RMS Voltage	V_{RMS}	140	280	420	560	Volts
Maximum DC Blocking Voltage	V_{DC}	200	400	600	800	Volts
Maximum Average Forward Rectified Current. Lead Length @Ta(Fig 1)	$I_{(AV)}$	3.0				Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	120				Amp
Maximum Forward Voltage @$I_{(AV)}$	V_F	1.0	1.3	1.7	1.85	Volts
Maximum DC reverse current at rated DC blocking voltage per T_j=25℃ T_j=100℃	I_R	10.0 500				uAmp
Typical Thermal Resistance T_J =25℃	$R_{\theta}JC$	2.0				℃/W
Maximum Reverse Recovery Time (Note 1)	T_{RR}	35			75	nS
Typical Junction Capacitance (Note 2)	C_J	150				pF
Operating Temperature Range T_J	T_J	-55 to +150				℃
Storage Temperature Range T_{STG}	T_{STG}	-55 to +150				℃

Note:

1. Measured with I_F =0.5A, IR =1A, IRR =0.25A.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
3. The typical data above is for reference only.

※**This product The above data sheet typical data meet the Mentioned standards,designers for reference only**

※ Ordering Information (Example)

Prefered P/N	Package code	Unit weight(g)	Minimum Package(pcs)	Inner box Quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
DO-27	T1	about 1.05	1250	1250	12500	Tape
DO-201AD	B1	about 1.05	250	250	12500	Bulk
DO-201AE	B2	about 1.05	250	250	10000	Bulk

RATINGS AND CHARACTERISTIV CURVES

RoHS COMPLIANT

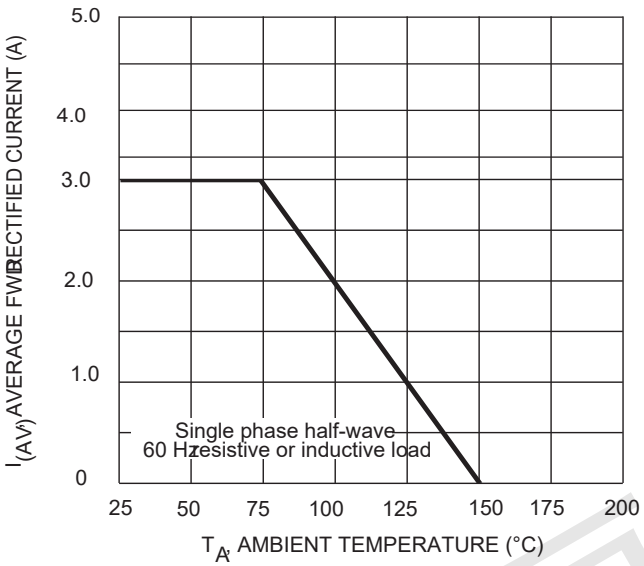


Fig. 1 Forward Derating Curve

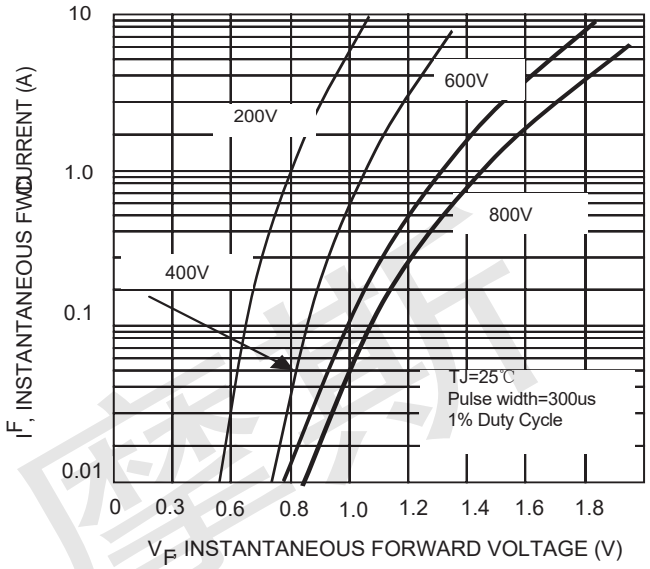


Fig. 2 Typical Forward Characteristics

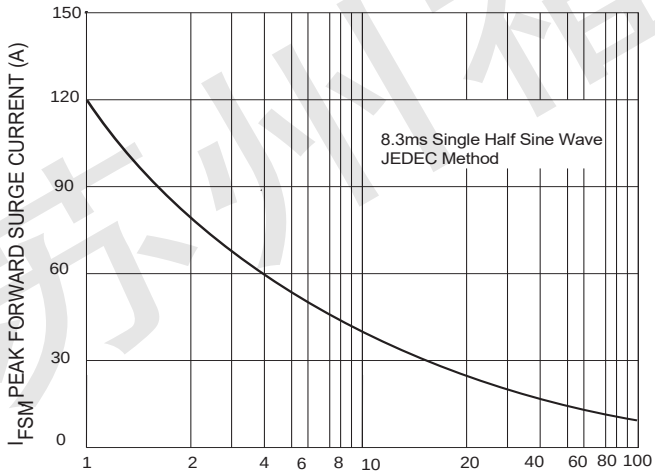


Fig. 3 Peak Forward Surge Current

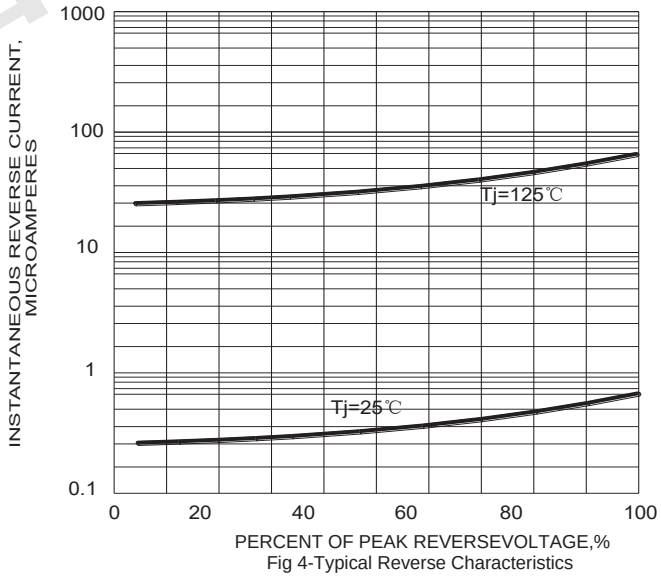
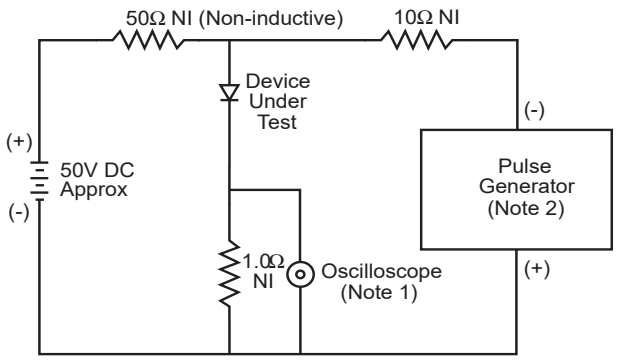
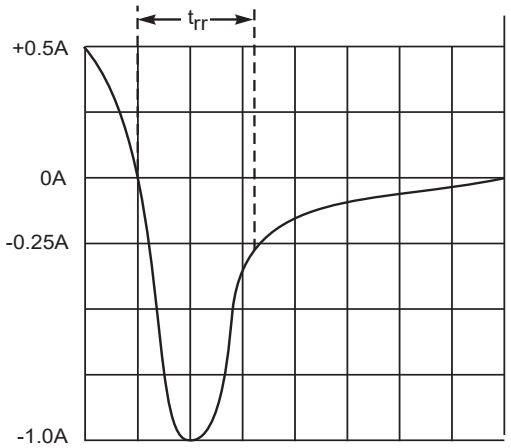


Fig 4-Typical Reverse Characteristics



Notes:
1. Rise Time=7ns max .Inpot Impedance=1MΩ 22pf
2. Rise Time=10ns max.Sourse Impedance=50Ω



Set time base for 5/10ns/cm

Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

苏州福摩斯