

SF31G THRU SF38G

SUPER FAST RECOVERY RECTIFIER

VOLTAGE: 50-600V

CURRENT: 3.0A

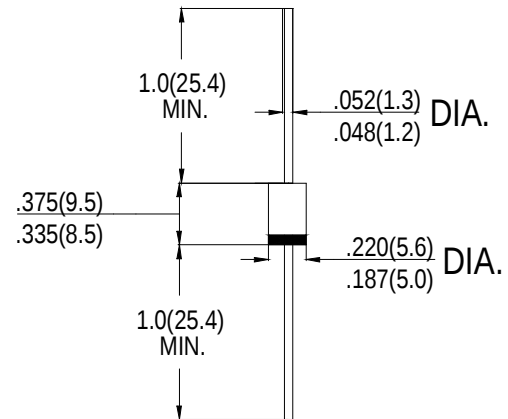
FEATURES

- High reliability
- Low leakage
- Low forward voltage
- High current capability
- Super fast switching speed
- High surge capability
- Good for switching mode circuit

MECHANICAL DATA

- **Case:** Molded plastic
- **Epoxy:** UL94V-0 rate flame retardant
- **Lead:** MIL-STD- 202E, Method 208 guaranteed
- **Polarity:** Color band denotes cathode end
- **Mounting position:** Any
- **Weight:** 1.18 grams

DO-27



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

	SYMBOL	SF31 G	SF32 G	SF33 G	SF34 G	SF35 G	SF36 G	SF37 G	SF38 G	units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	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}	50	100	150	200	300	400	500	600	V
Maximum Average Forward rectified Current at T _A =55°C	I _o	3.0								A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I _{FSM}	125								A
Maximum Instantaneous forward Voltage at 3.0A DC	V _F	0.95				1.4		1.85		V
Maximum DC Reverse Current at Rated DC Blocking Voltage T _A =25°C	I _R	5.0								μA
Maximum Full Load Reverse Current Full Cycle Average,.375"(9.5mm) lead length		300								
Maximum Reverse Recovery Time (Note 2)	t _{rr}	35								nS
Typical Junction Capacitance (Note 2)	C _J	50				30				pF

Notes: 1. Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$

2. Measured at 1MHz and applied reverse voltage of 4.0 volts