



# SF51G THRU SF56G

## SUPER FAST RECOVERY RECTIFIER

VOLTAGE: 50-600V

CURRENT: 5.0A

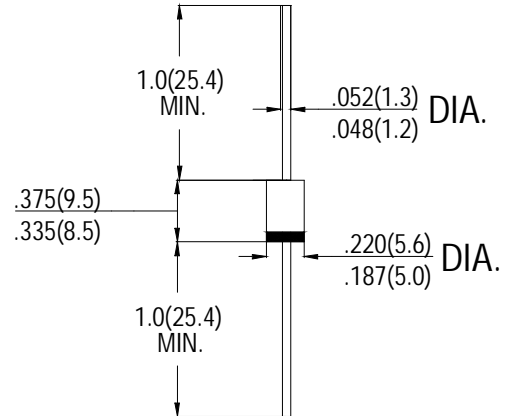
### FEATURES

- 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	SF51G	SF52G	SF53G	SF54G	SF55G	SF56G	SF57G	SF58G	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 $T_A=55^\circ C$	$I_o$	5.0								A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed	$I_{FSM}$	150								A
Maximum Instantaneous forward Voltage at 5.0A DC	$V_F$	0.95			1.4		1.85			V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A=25^\circ C$	$I_R$	5.0								$\mu A$
Maximum Full Load Reverse Current Full Cycle		100								
Maximum Reverse	$t_{rr}$	35								nS
Typical Junction	$C_J$	120				60				pF

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

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