



SF11(L)G THRU SF16(L)G

1.0 AMP. GLASS PASSIVATED SUPER FAST RECTIFIERS

FEATURES

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

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting Position: Any
- * Weight: 0.22 grams(DO41: 0.34 grams)

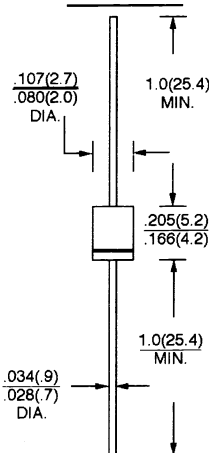
VOLTAGE RANGE

50 to 400 Volts

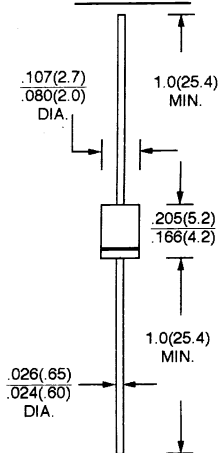
CURRENT

1.0 Ampere

DO-41



A-405



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

TYPE NUMBER	SYMBOLS	SF 11(L)G	SF 12(L)G	SF 13(L)G	SF 14(L)G	SF 15(L)G	SF 16(L)G	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	V
Maximum RMS Voltage	V _{RMS}	35	70	105	140	210	280	V
Maximum D. C Blocking Voltage	V _{DC}	50	100	150	200	300	400	V
Maximum Average Forward Current .375" (9.5mm) lead length @ T _A = 55°C	I _{F(AV)}	1.0						A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	30						A
Maximum Instantaneous Forward Voltage at 1.0A	V _F	0.95				1.25		V
Maximum D. C Reverse Current @ T _A = 25°C at Rated D. C Blocking Voltage @ T _A = 125°C	I _R	5.0 50						μA μA
Maximum Reverse Recovery Time (Note 1)	T _{RR}	35						nS
Typical Junction Capacitance (Note 2)	C _J	50				25		pF
Operating and Storage Temperature Range	T _J , T _{STG}	- 65 to + 150						°C

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

2. Measured at 1 MHz and applied reverse voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (SF11(L)G THRU SF16(L)G)

FIG. 1 – TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS

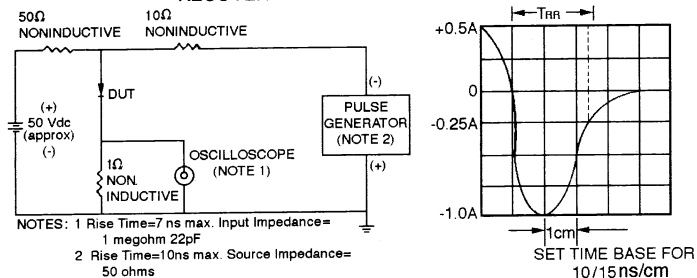


FIG. 2 – TYPICAL FORWARD CURRENT DERATING CURVE

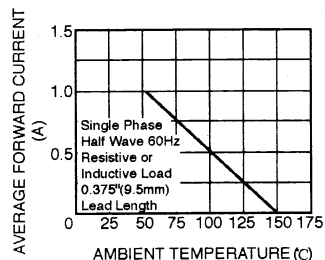


FIG. 3 – TYPICAL REVERSE CHARACTERISTICS

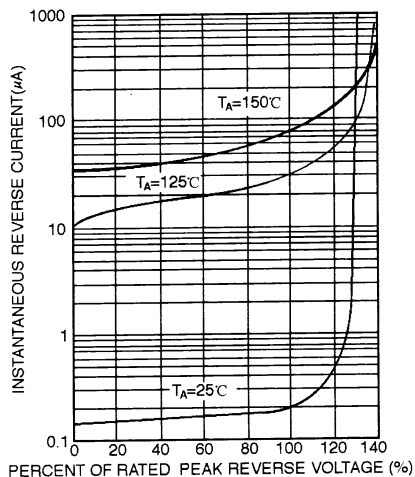


FIG. 4 – TYPICAL FORWARD CHARACTERISTICS

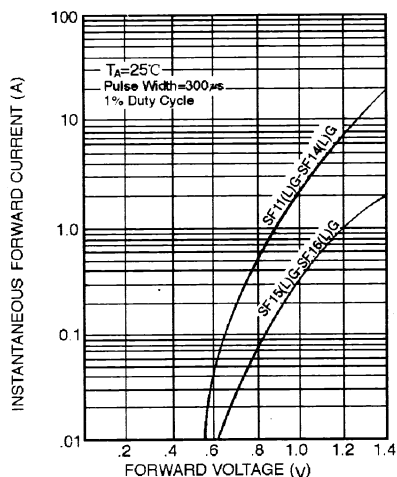


FIG. 5 – MAXIMUM NON – REPETITIVE FORWARD SURGE CURRENT

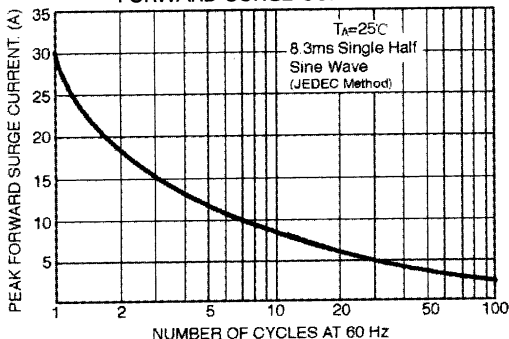


FIG. 6 – TYPICAL JUNCTION CAPACITANCE

