SEMICONDUCTOR

DATA SHEET

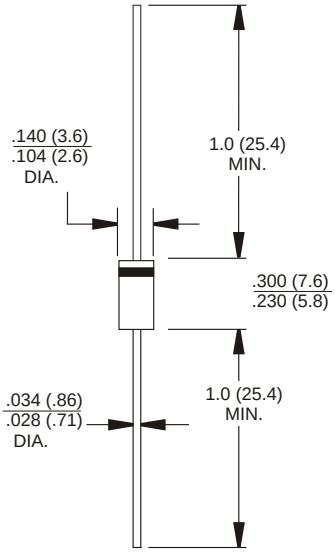
SF21G~SF28G

SUPERFAST RECOVERY RECTIFIERS
VOLTAGE - 50 to 800 Volts CURRENT - 2.0 Amperes

FEATURES

- Superfast recovery times-epitaxial construction
- Low forward voltage, high current capability
- Exceeds environmental standards of MIL-S-19500/228
- Hermetically sealed
- Low leakage
- High surge capability
- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- High temperature soldering : 260°C/ 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

DO-15 Unit:inch(mm)



MECHANICAL DATA

- Case: Molded plastic, DO-15
- Terminals: Axial leads, solderable to MIL-STD-202, Method 208
- Polarity: Color Band denotes cathode end
- Mounting Position: Any
- Weight: 0.015 ounce, 0.4 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Resistive or inductive load, 60Hz.

	SYMBOLS	SF21G	SF22G	SF23G	SF24G	SF25G	SF26G	SF27G	SF28G	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	150	200	300	400	600	800	V
Maximum RMS Voltage	VRMS	35	70	105	140	210	280	420	560	V
Maximum DC Blocking Voltage	VDC	50	100	150	200	300	400	600	800	V
Maximum Average Forward Current .375"(9.5mm) lead length at TA=55°C	I(AV)	2.0								A
Peak Forward Surge Current, IFM (surge): 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	IFSM	50.0								A
Maximum Forward Voltage at 2.0A DC	VF	0.95				1.25		1.7		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	5.0								uA
Maximum DC Reverse Current at Rated DC Blocking Voltage TA=125°C	IR	200								uA
Maximum Reverse Recovery Time(Note 1)	TRR	35.0								nS
Typical Junction capacitance (Note 2)	CJ	22								pF
Typical Junction Resistance(Note 3)	RθJA	40								°C /W
Operating and Storage Temperature Range TJ	TJ,TSTG	-55 to +150								°C

NOTES:

1. Reverse Recovery Test Conditions: IF=.5A, IR=1A, Irr=.25A
2. Measured at 1 MHz and applied reverse voltage of 4.0 VDC
3. Thermal resistance from junction to ambient and from junction to lead length 0.375"(9.5mm) P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES

SF21G~SF28G

RATING AND CHARACTERISTIC CURVES

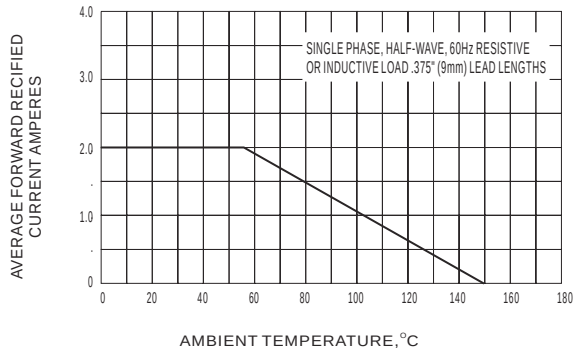


FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT RATING

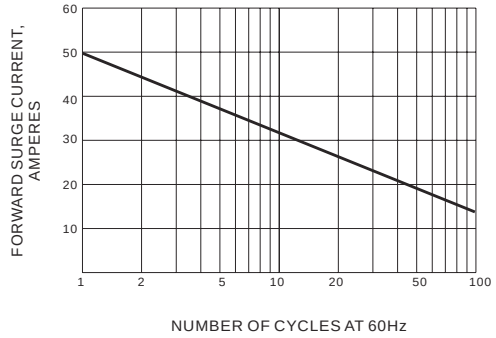


FIG. 2 MAXIMUM NON-REPEITIVE SURGE CURRENT

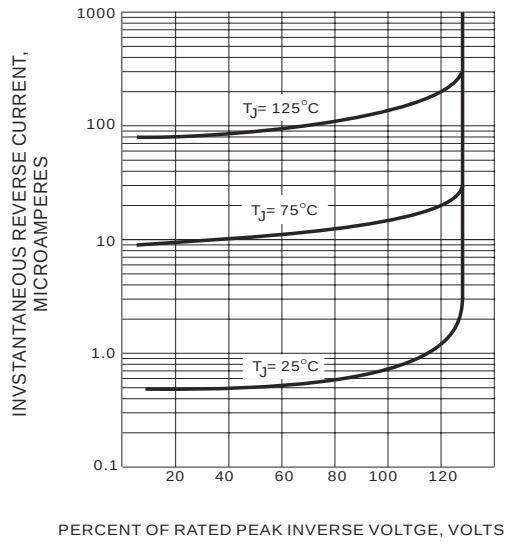


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

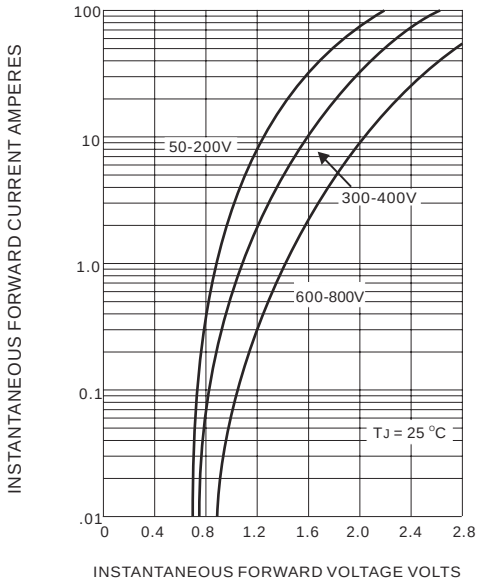


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

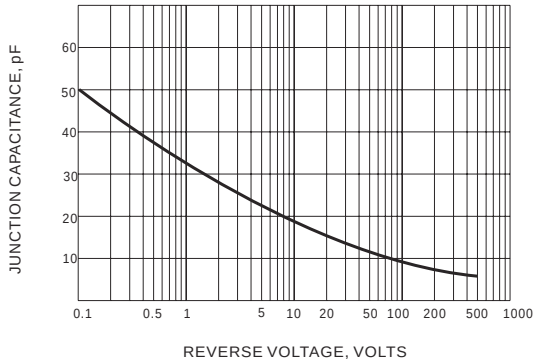


FIG. 5 TYPICAL JUNCTION CAPACITANCE