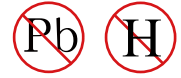




SUPERFAST RECOVERY RECTIFIERS



VOLTAGE - 50 to 800 Volts CURRENT - 1.0 Ampere

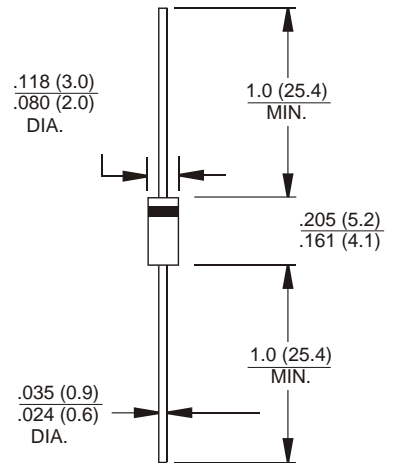
FEATURES

- 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-0 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

MECHANICAL DATA

- Case: Molded plastic, DO-41
- Terminals: Axial leads, solderable to MIL-STD-202, Method 208
- Polarity: Color Band denotes cathode end
- Mounting Position: Any
- Weight: 0.012 ounce, 0.3 gram

DO-41 Unit:inch (mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Resistive or inductive load, 60Hz.

PARAMETER	SYMBOLS	SF11G	SF12G	SF13G	SF14G	SF15G	SF16G	SF17G	SF18G	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	320	420	640	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)	1.0								A
Peak Forward Surge Current, IFM (surge): 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	IFSM	30.0								A
Maximum Forward Voltage at 1.0A 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	150								uA
Maximum Reverse Recovery Time(Note 1)	TRR	35.0								nS
Typical Junction capacitance (Note 2)	CJ	17								pF
Typical Junction Resistance(Note 3)	RθJA	50								°C/W
Operating and Storage Temperature Range	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

DEVICE CHARACTERISTICS

SF11G THRU SF18G

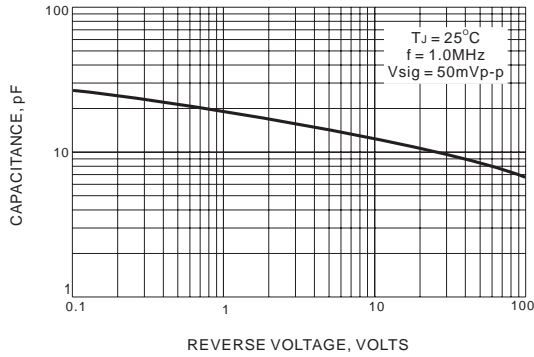


FIG.1 TYPICAL JUNCTION CAPACITANCE

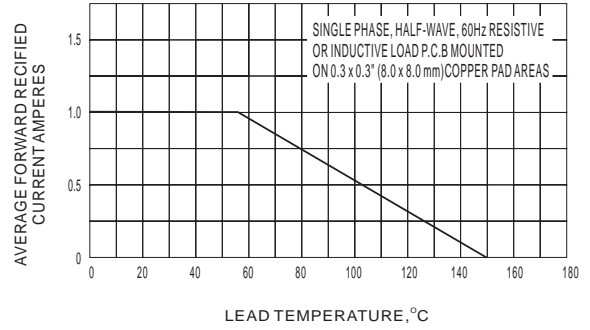


FIG.2 MAXIMUM AVERAGE FORWARD CURRENT DERATING

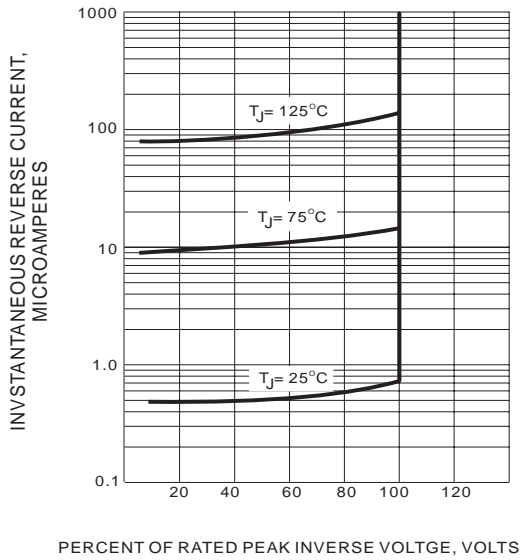


FIG.3 TYPICAL REVERSE CHARACTERISTICS

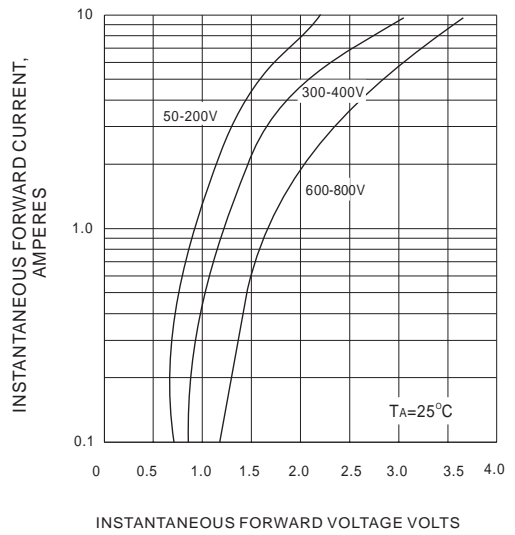


FIG.4 TYPICAL FORWARD CHARACTERISTICS

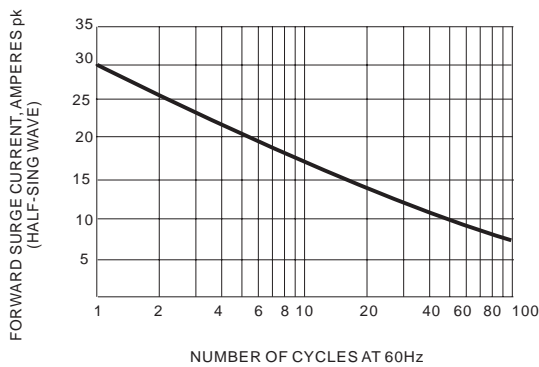


FIG.5 MAXIMUM NON-REPETITIVE SURGE CURRENT