



S E M I C O N D U C T O R

SF201 THRU SF206

SUPER FAST RECTIFIER

Reverse Voltage: 50 to 400 Volts
Forward Current: 2.0 Amperes

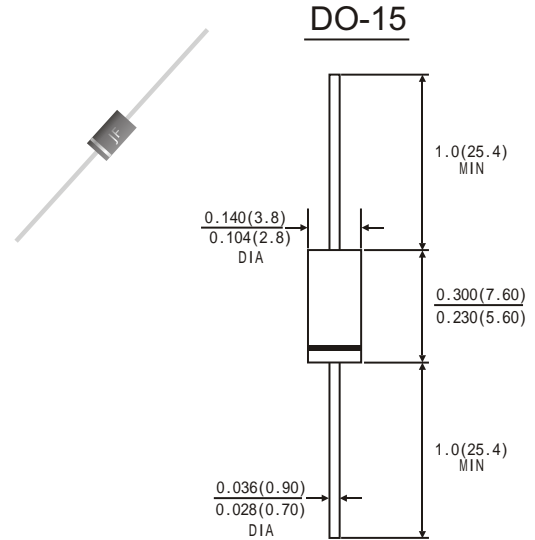
SILICON RECTIFIER

FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Super fast recovery time
- Good for use in switching mode circuits
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0

MECHANICAL DATA

- Case: JEDEC DO-15 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.014ounce, 0.40 gram



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25 °C ambient temperature unless otherwise specified, Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.)

	Symbols	SF 201	SF 202	SF 203	SF 204	SF 205	SF 206	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	150	200	300	400	Volts
Maximum RMS Voltage	VRMS	35	70	105	140	210	280	Volts
Maximum DC Blocking Voltage	VDC	50	100	150	200	300	400	Volts
Maximum Average Forward Rectified Current 0.375"(9.5mm)lead length at TA=55 °C	I(AV)	2.0						Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	50.0						Amps
Maximum Instantaneous Forward Voltage at 2.0 A	VF	0.95				1.25		Volts
Maximum DC Reverse Current at rated DC Blocking Voltage	TA=25°C	5.0						µA
	TA=100°C	50						
Maximum reverse recovery time(Note 1)	Trr	35						ns
Typical Junction Capacitance(note2)	Cj	60				30		pF
Operating Junction And Storage Temperature Range	Tj	-65 to +125						°C
	TSTG	-65 to +150						

Note: 1. Test conditions: IF=0.5A, IR=1.0A, IRR=0.25A.

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

RATINGS AND CHARACTERISTIC CURVES SF201 THRU SF206

FIG.1-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

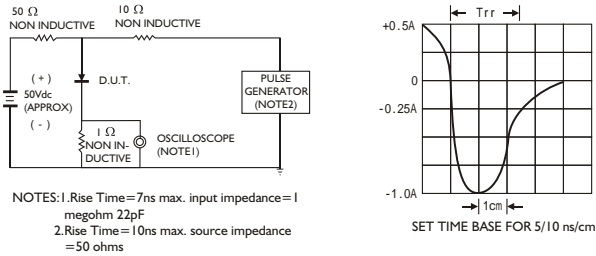


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

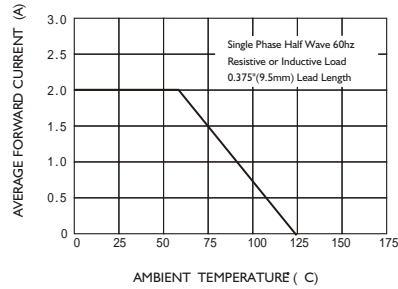


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

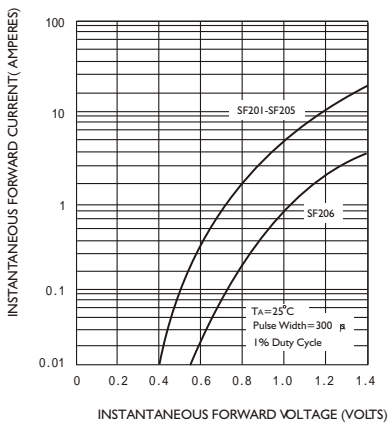


FIG.4-TYPICAL REVERSE CHARACTERISTICS

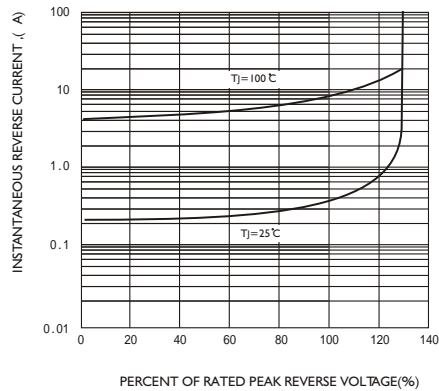


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

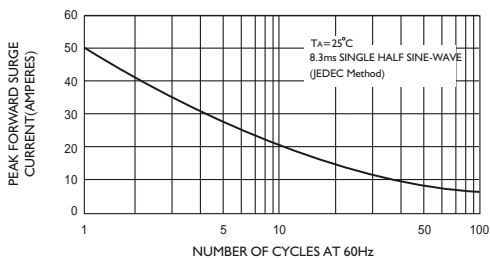


FIG.6-TYPICAL JUNCTION CAPACITANCE

