

SF101 THRU SF106

SUPER FAST RECTIFIER

Reverse Voltage - 50 to 400 Volts Forward Current - 1.0Ampere

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

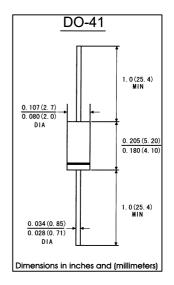
. Case: JEDEC DO-41 molded plastic body

. Terminals: plated axial leads, solderable per MIL-STD-750, method 2026

. Polarity: Color band denotes cathode end

. Mounting Position: Any

. Weight: 0.012 ounce, 0.34 gram



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 101	SF 102	SF 103	SF 104	SF 105	SF 106	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 D.C blocking voltage	VDC	50	100	150	200	300	400	Volts
Maximum average forward rectified	I(AV)	1.0						Amp
current 0.375"(9.5mm)lead length @ at T _A =55°C								
Peak forward surge current 8.3ms single half		30.0						
sine-wave superimposed on rated load	IFSM						Amps	
(JEDEC method)								
Maximum instantaneous forward voltage at 1.0 A	VF	0.95 1.25				Volts		
Maximum DC Reverse T _A =25 °C	lr.	5.0					μА	
Current At Rated DC Blocking Voltage Ta=100℃	50							
Maximum reverse recovery time(Note 1)	Trr	35					ns	
Typical junction Capacitance(Note 2)	Сл	50 25			5	pF		
Operating junction and storage temperature range	TJ	-65 to +125 -65 to +150						$^{\circ}$
	TSTG							

Notes: 1.Test conditions:IF=0.5A,IR=1.0A,Irr=0.25A.

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



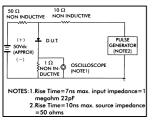
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RATINGS AND CHARACTERISTIC CURVES SF101 THRU SF106

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



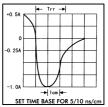


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

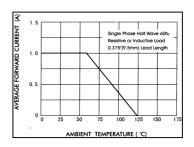


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

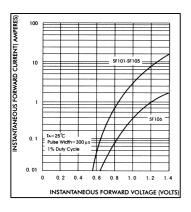


FIG.4-TYPICAL REVERSE CHARACTERISTICS

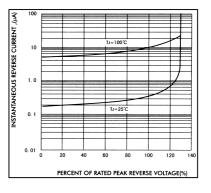


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

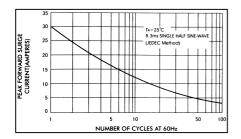


FIG.6-TYPICAL JUNCTION CAPACITANCE

