

SF101~SF107

SUPER FAST RECOVERY SILICON DIODES

Reverse Voltage – 50 to 1000 Volts

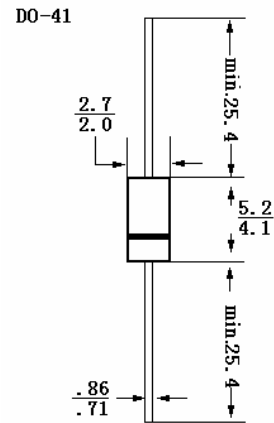
Forward Current – 1.0 Ampere

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0.
- Void free moulded plastic technique
- Fast switching for high efficiency
- High forward surge current capability
- High temperature soldering: 250°C/10s, 0.375"(9.5mm) lead length, 5lbs(2.3Kg) tension

Mechanical Data

- **Case:** DO-41 plastic moulded
- **Terminals:** Lead –Tin plated axial leads, solderable per MIL-STD-750, method 2026
- **Polarity:** Colored band (silver) denotes cathode
- **Mounting position:** Any



VOLTAGE RANGE
50 to 1000 Volts
CURRENT
1.0 Amperes

Dimensions in mm

Absolute Maximum Ratings and Characteristics

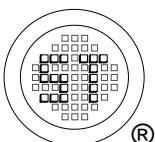
Rating at 25°C ambient temperature unless otherwise specified.

	Symbols	SF101	SF102	SF103	SF104	SF105	SF106	SF107	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 0.375" Lead Length at $T_A = 50^\circ C$	$I_{(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (MIL-STD-750D 4065 method)	I_{FSM}	30							A
Maximum Forward Voltage at 1.0A	V_F	1.0		1.25		1.4			V
Maximum DC Reverse Current at $T_a = 25^\circ C$ at Rated DC Blocking Voltage at $T_a = 125^\circ C$	I_R	5.0 400							uA
Maximum Time of Reverse Recovery (note1)	T_{rr}	35							nS
Typical Junction Capacitance(note2)	C_j	22							pF
Typical Thermal Resistance(note3)	R_{ja}	50							$^\circ C/W$
Operating Junction Temperature	T_j	-55 to +150							$^\circ C$
Storage Temperature Range	T_s	-55 to +150							$^\circ C$

Notes: 1.Reverse recovery test conditions: $I_F = 0.5A$, $I_R = 1.0A$, $I_{rr} = 0.25A$.

2.Measured at 1.0MHz and applied reverse voltage of 4.0V

3.Thermal resistance from junction ambient and from junction to lead at 9.5mm lead length, P.C.B mounted.



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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
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