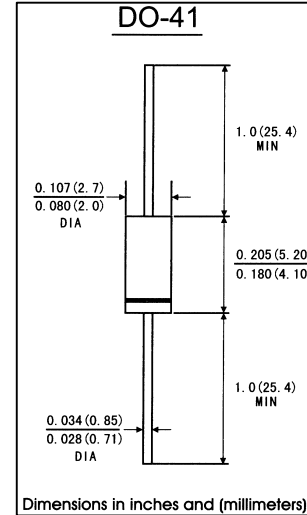


FEATURES

- . 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	V _{RRM}	50	100	150	200	300	400	Volts
Maximum RMS voltage	V _{RMS}	35	70	105	140	210	280	Volts
Maximum D.C blocking voltage	V _{DC}	50	100	150	200	300	400	Volts
Maximum average forward rectified current 0.375"(9.5mm)lead length @ at T _A =55°C	I _(AV)	1.0						Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	30.0						Amps
Maximum instantaneous forward voltage at 1.0 A	V _F	0.95				1.25		Volts
Maximum DC Reverse Current At Rated DC Blocking Voltage	T _A =25°C	5.0						μ A
	T _A =100°C	50						
Maximum reverse recovery time(Note 1)	T _{rr}	35						ns
Typical junction Capacitance(Note 2)	C _J	50				25		pF
Operating junction and storage temperature range	T _J	-65 to +125						°C
	T _{STG}	-65 to +150						

Notes: 1. Test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A.

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

RATINGS AND CHARACTERISTIC CURVES SF101 THRU SF106

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

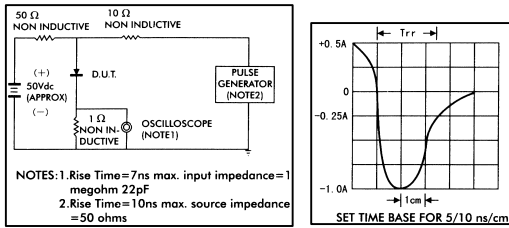


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

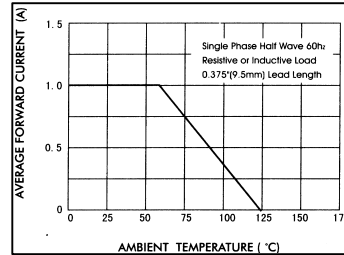


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

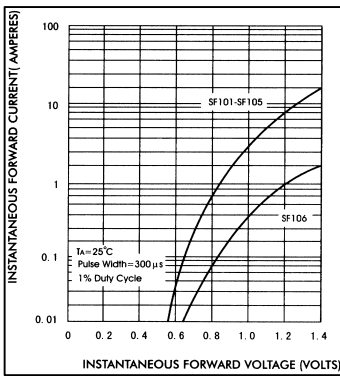


FIG.4-TYPICAL REVERSE CHARACTERISTICS

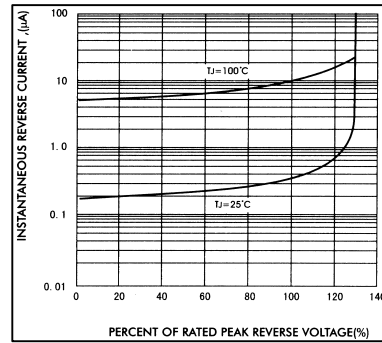


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

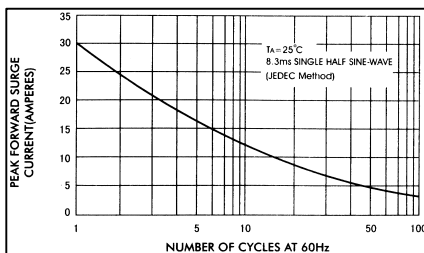


FIG.6-TYPICAL JUNCTION CAPACITANCE

