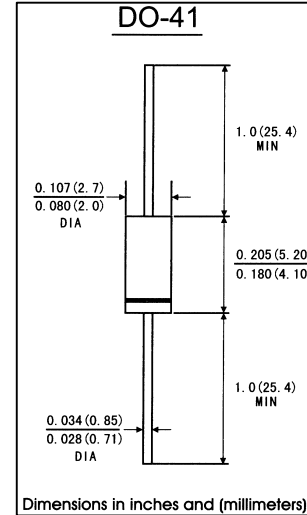


FEATURES

- . 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

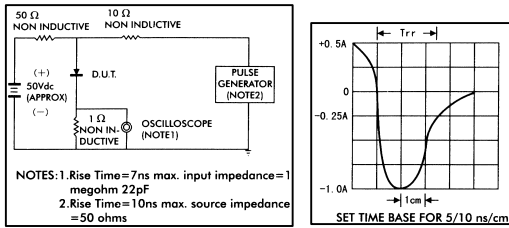


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

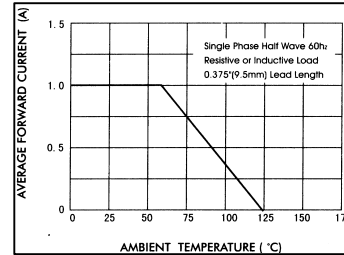


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

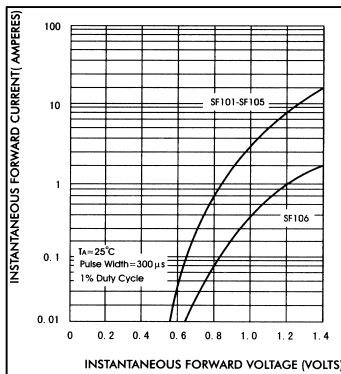


FIG.4-TYPICAL REVERSE CHARACTERISTICS

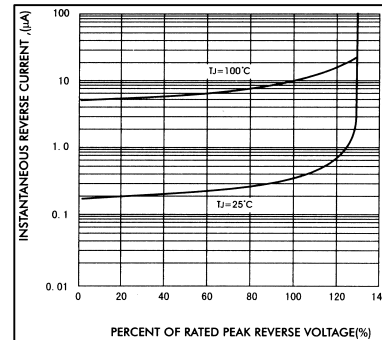


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

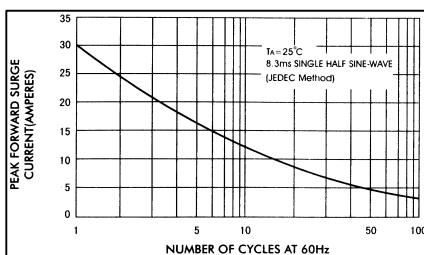


FIG.6-TYPICAL JUNCTION CAPACITANCE

