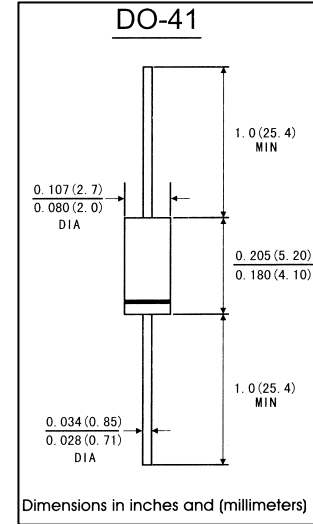


FEATURES

- . Plastic package has Underwrites Laboratory Flammability Classification 94V-0
- . Fast switching speed
- . Construction utilizes void-free molded plastic technique
- . Low forward voltage drop,high efficiency
- . High current capability
- . High reliability

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, 0.33 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings 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	FR101	FR102	FR103	FR104	FR105	FR106	FR107	Units
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	100	Volts
Macimum average forward rectified current 0.375"(9.5mm)lead length at T _A =75°C	I _(AV)	1.0							Amp
Peak forward surge current 8.3ms sing-wave superimposed on rated load (JEDEC method)	I _{FSM}	30.0							Amps
Maximum instantaneous forward voltage at 1.0 A	V _F	1.3							Volts
Maximum DC Rreverse Current at rated DC blocking voltage	I _R	5.0							μ A
Maximum full load reverse current full cycle average. 0.375"(9.5mm)lead length at T _L =55°C		100							
Maximum reverse recovery time(Note 1)	T _{rr}	150				250	500		ns
Typical junction Capacitance(Note 2)	C _J	15.0							pF
Operating and storage temperature range	T _J T _{STG}	-65 to +150							°C

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 4.0V Volts

RATINGS AND CHARACTERISTIC CURVES FR101 THRU FR107

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

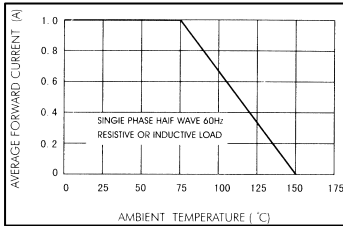


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

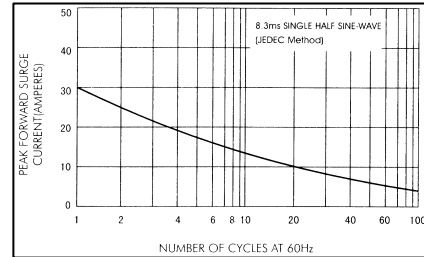


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

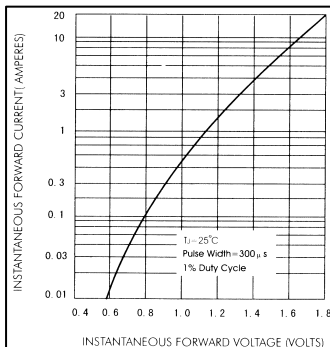


FIG.4-TYPICAL REVERSE CHARACTERISTICS

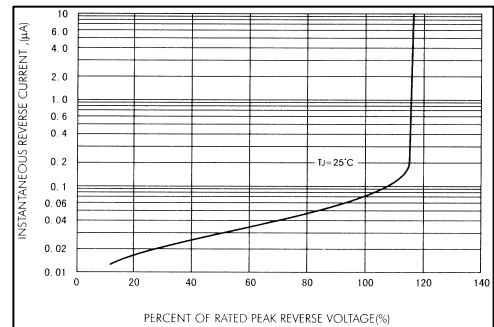


FIG.5-TYPICAL JUNCTION CAPACITANCE

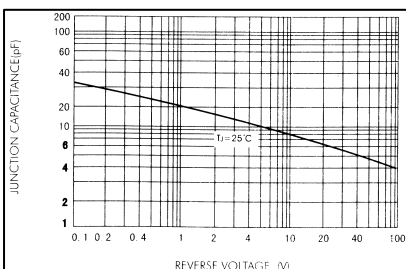


FIG.6-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

