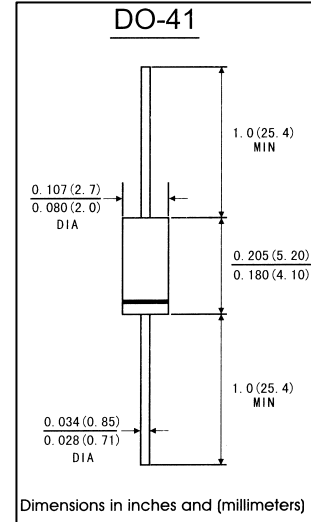


**FEATURES**

- . 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%)

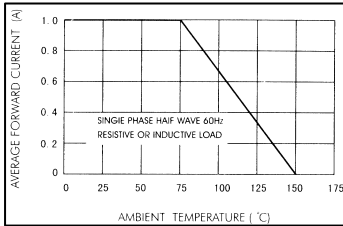
	Symbols	FR101	FR102	FR103	FR104	FR105	FR106	FR107	Units
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	100	Volts
Macimum average forward rectified current 0.375"(9.5mm)lead length at TA=75°C	I(AV)	1.0							Amp
Peak forward surge current 8.3ms sing-wave superimposed on rated load (JEDEC method)	IFSM	30.0							Amps
Maximum instantaneous forward voltage at 1.0 A	VF	1.3							Volts
Maximum DC Rreverse Current at rated DC blocking voltage	IR	5.0							μ A
Maximum full load reverse current full cycle average. 0.375"(9.5mm)lead length at TL=55°C		100							
Maximum reverse recovery time(Note 1)	Trr	150				250	500		ns
Typical junction Capacitance(Note 2)	CJ	15.0							pF
Operating and storage temperature range	TJ TSTG	-65 to +150							°C

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

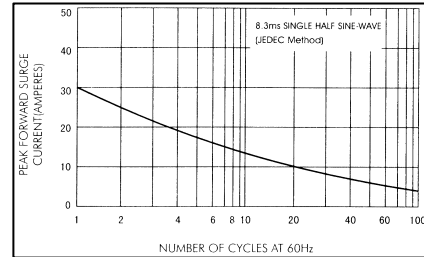
2. Measured at 1MHz and applied reverse voltage of 4.0V Volts

## RATINGS AND CHARACTERISTIC CURVES FR101 THRU FR107

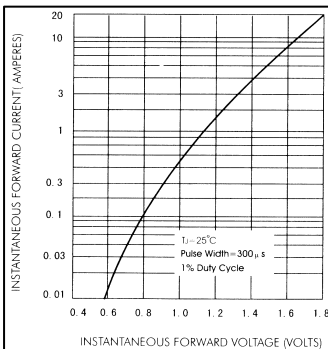
**FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE**



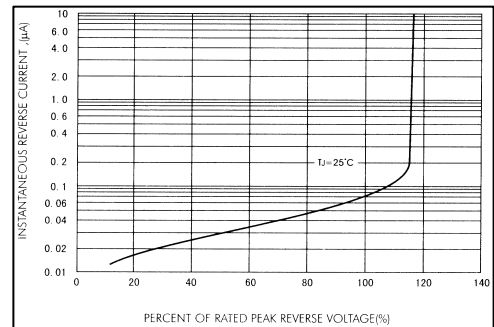
**FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



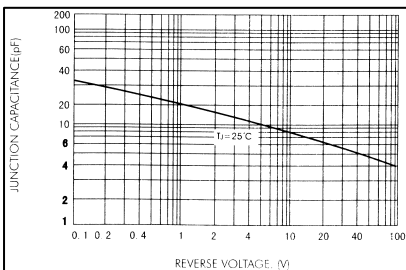
**FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.4-TYPICAL REVERSE CHARACTERISTICS**



**FIG.5-TYPICAL JUNCTION CAPACITANCE**



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

