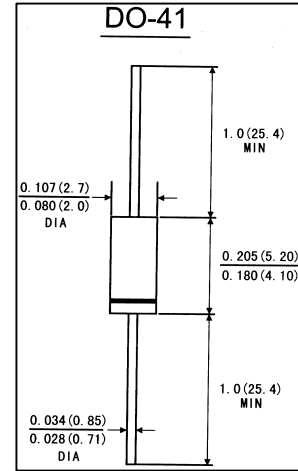


### FEATURES

- . Fast switching
- . Low leakage
- . Low forward voltage drop,high efficiency
- . High current capability
- . Glass passivated junction
- . High reliability capability

### 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



Dimensions in inches and (millimeters)

### 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	FR101G	FR102G	FR103G	FR104G	FR105G	FR106G	FR107G	Units
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	100	Volts
Macimum average forward rectified current 0.375"(9.5mm)lead length at T <sub>A</sub> =55°C	I <sub>(AV)</sub>	1.0							Amp
Peak forward surge current 8.3ms single half sing-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30.0							Amps
Maximum instantaneous forward voltage at 1.0 A	V <sub>F</sub>	1.3							Volts
Maximum DC Rreverse Current at rated DC blocking voltage	I <sub>R</sub>	5.0							μ A
Maximum full load reverse current full cycle average. 0.375"(9.5mm)lead length at T <sub>L</sub> =55°C		100							
Maximum reverse recovery time(Note 1)	T <sub>rr</sub>	150			250	500		ns	
Typical junction Capacitance(Note 2)	C <sub>J</sub>	15.0							pF
Operating and storage temperature range	T <sub>J</sub> T <sub>STG</sub>	-65 to +150							°C

**Notes:** 1.Test conditions:I<sub>F</sub>=0.5A,I<sub>R</sub>=1.0A,I<sub>rr</sub>=0.25A.

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

### RATINGS AND CHARACTERISTIC CURVES FR101G THRU FR107G

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

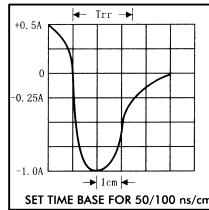
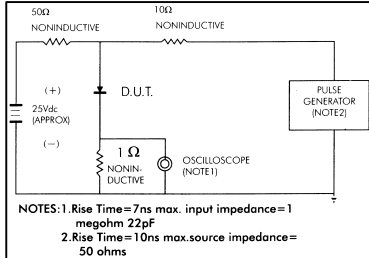


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

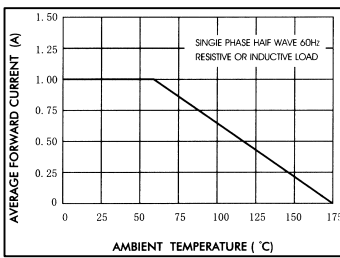


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

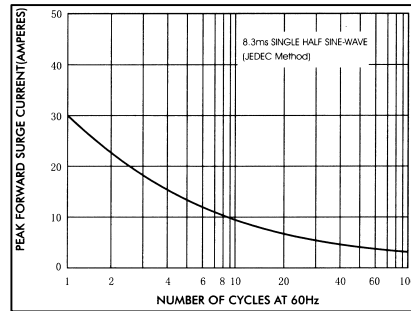


FIG.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

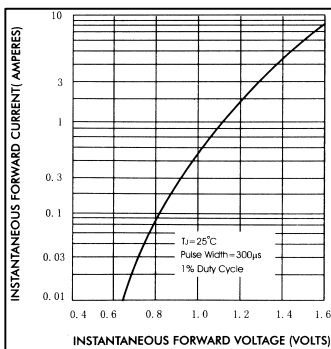


FIG.5-TYPICAL JUNCTION CAPACITANCE

