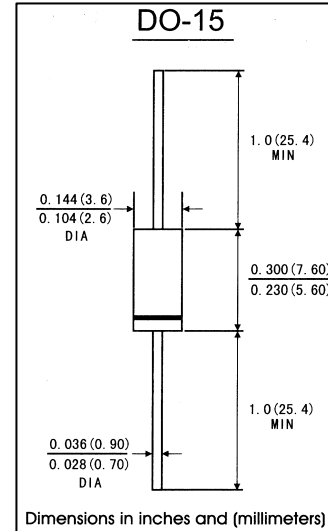


## FEATURES

- . Fast switching
- . Low leakage
- . Low forward voltage drop
- . High current capability
- . High current surge
- . High reliability

## MECHANICAL DATA

- . **Case:** JEDEC DO-15 molded plastic body
- . **Terminals:** Plated axial leads,solderable per MIL-STD-750,method 2026
- . **Polarity:** Color band denotes cathode end
- . **Mounting Position:** Any
- . **Weight:** 0.014 ounce, 0.39 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%)

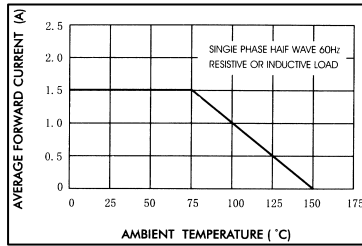
	Symbols	FR151	FR152	FR153	FR154	FR155	FR156	FR157	Units
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	100	Volts
Macimum average forward rectified current 0.375"(9.5mm)lead length at T <sub>A</sub> =75°C	I <sub>(AV)</sub>	1.5							Amp
Peak forward surge current 8.3ms sing-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	60.0							Amps
Maximum instantaneous forward voltage at 1.5 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		40.0							
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.

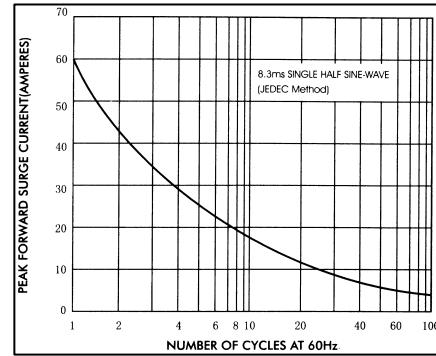
2. Measured at 1MHz and applied reverse voltage of 4.0V Volts

## RATINGS AND CHARACTERISTIC CURVES FR151 THRU FR157

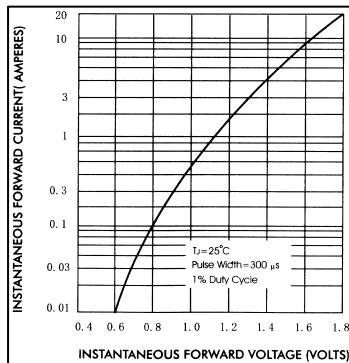
**FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE**



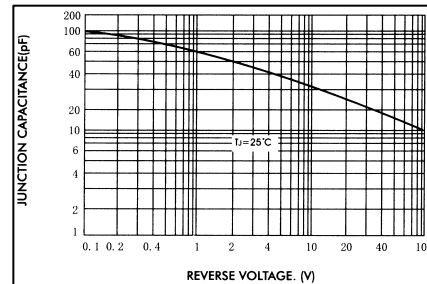
**FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



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



**FIG.4-TYPICAL JUNCTION CAPACITANCE**



**FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC**

