

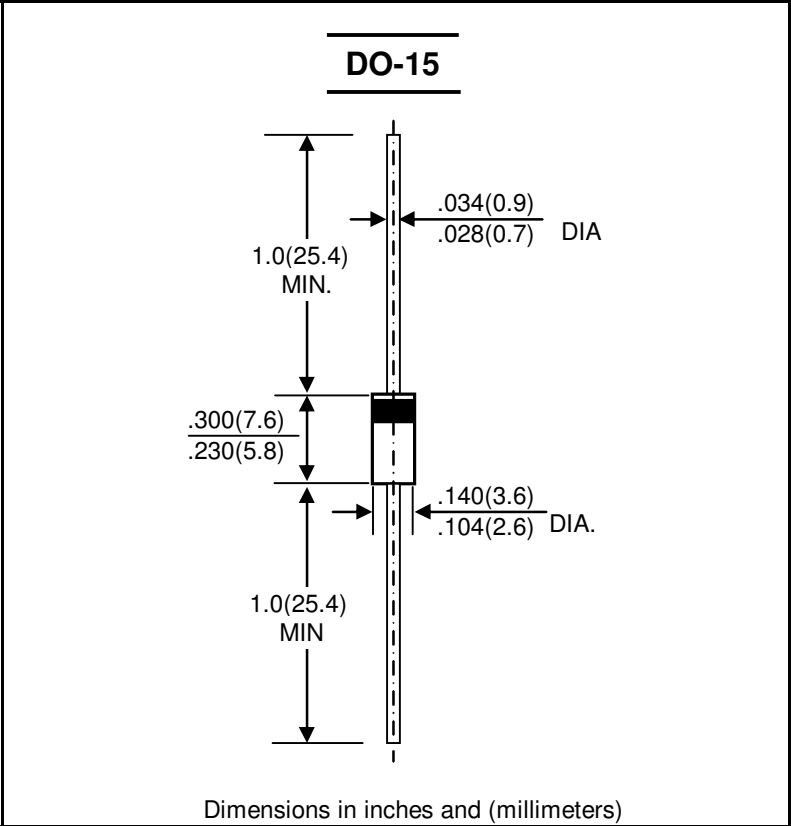
<b>FAST RECOVERY RECTIFIERS</b>	<b>REVERSE VOLTAGE - 50 to 1000 Volts</b> <b>FORWARD CURRENT - 1.5 Amperes</b>
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**FEATURES**

- Fast switching for high efficiency
- Low cost
- Diffused junction
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

**MECHANICAL DATA**

- Case: JEDEC DO-15 molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.015 ounces , 0.4 grams
- Mounting position: Any



**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%

CHARACTERISTICS	SYMBOL	FR151	FR152	FR153	FR154	FR155	FR156	FR157	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T <sub>A</sub> =75 °C	I(AV)	1.5							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I <sub>FSM</sub>	50							A
Peak Forward Voltage at 1.5A DC	V <sub>F</sub>	1.3							V
Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Blocking Voltage @T <sub>J</sub> =100°C	I <sub>R</sub>	5.0 100							μA
Maximum Reverse Recovery Time(Note 1)	T <sub>rr</sub>	150			250		500		nS
Typical Junction Capacitance (Note2)	C <sub>J</sub>	30			20				pF
Typical Thermal Resistance (Note3)	R <sub>θJA</sub>	25							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

NOTES: 1. Measured with I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, I<sub>RR</sub>=0.25A  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC  
 3. Thermal resistance junction to ambient.

REV. 1, 30-Dec-2011

FIG. 1 – FORWARD CURRENT DERATING CURVE

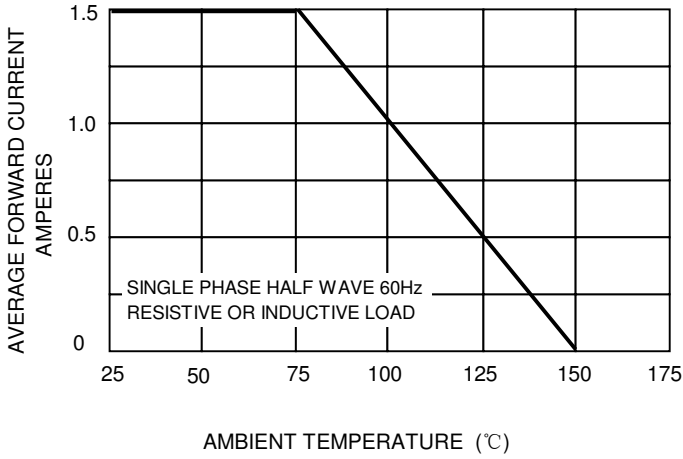


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

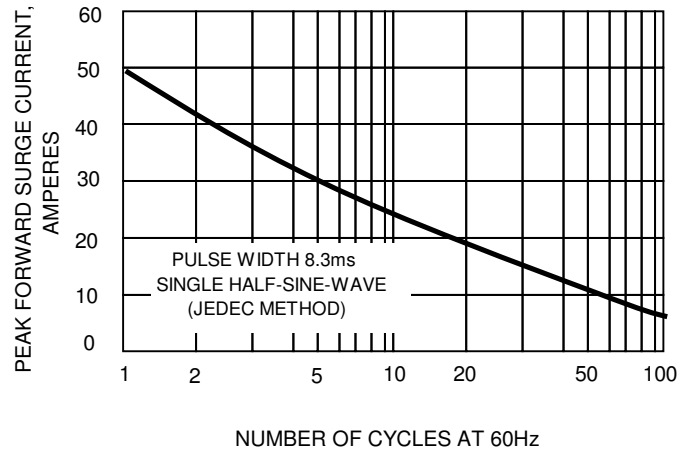


FIG.3 – TYPICAL JUNCTION CAPACITANCE

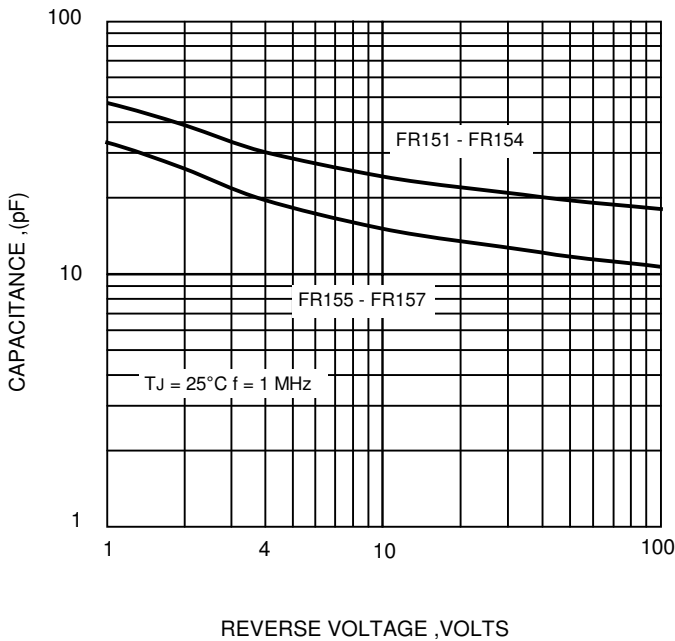


FIG.4-TYPICAL FORWARD CHARACTERISTICS

