



**Fast Recovery Rectifiers**

**Reverse Voltage 50 to 1000 Volts, Forward Current 2.0 Amperes**

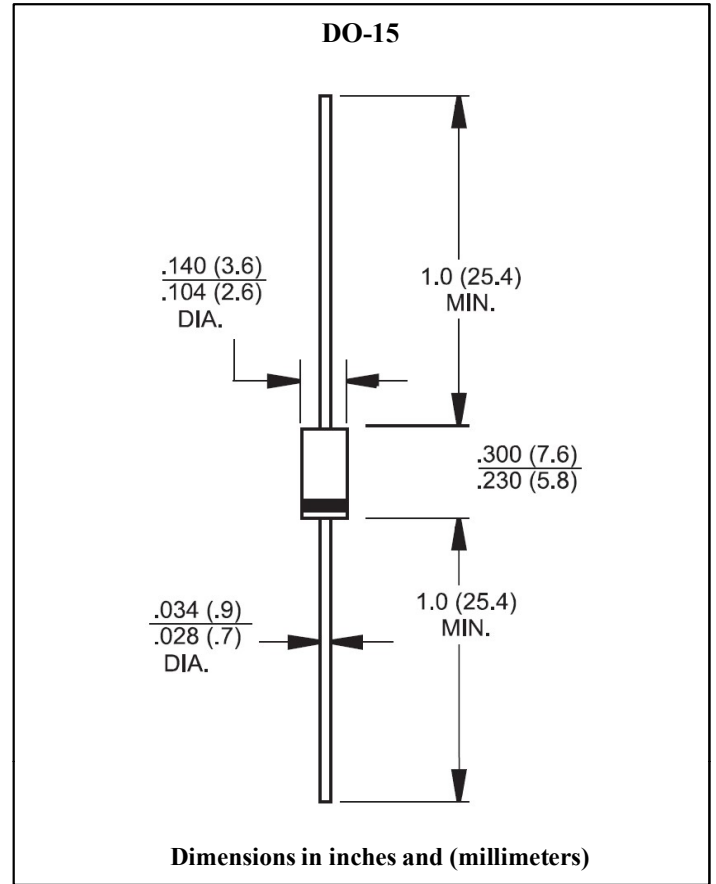
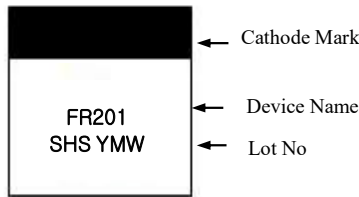
**Features**

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

**Mechanical Data**

- Case : Molded plastic DO-15 (DO-204AC)
- Epoxy : UL 94V-O rate flame retardant
- Terminals : Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity : Color band denotes cathode end
- High temperature soldering guaranteed : 260°C/10 seconds /0.375", (9.5mm) lead lengths at 5lbs., (2.3kg) tension
- Weight : 0.4 gram

**Marking**



**Maximum Ratings & Electrical Characteristics**

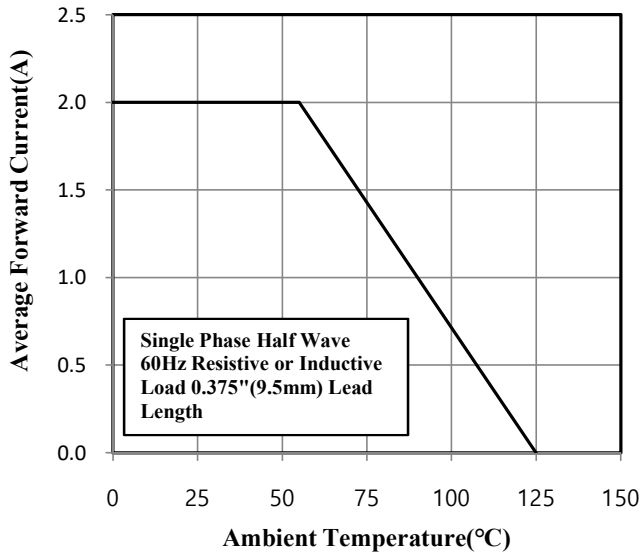
Ratings at 25°C ambient temperature unless otherwise specified  
Single phase half wave 60 HZ, resistive or inductive load  
For capacitive load, derate current by 20%

Parameter	Symbol	FR201	FR202	FR203	FR204	FR205	FR206	FR207	Unit	Remark
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length	$I_F(AV)$	2.0							A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	60							A	
Maximum Instantaneous Forward Voltage @ 2.0A	$V_F$	1.2							V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	5.0							uA	Ta=25°C
		100							uA	Ta=100°C
Maximum Reverse Recovery Time	$t_{rr}$	150			250	500			ns	Note 1
Typical Junction Capacitance	$C_J$	30							pF	Note 2
Operation Junction Temperature Range	$T_J$	-55 to +150							°C	
Storage Temperature Range	$T_{STG}$	-55 to +150							°C	

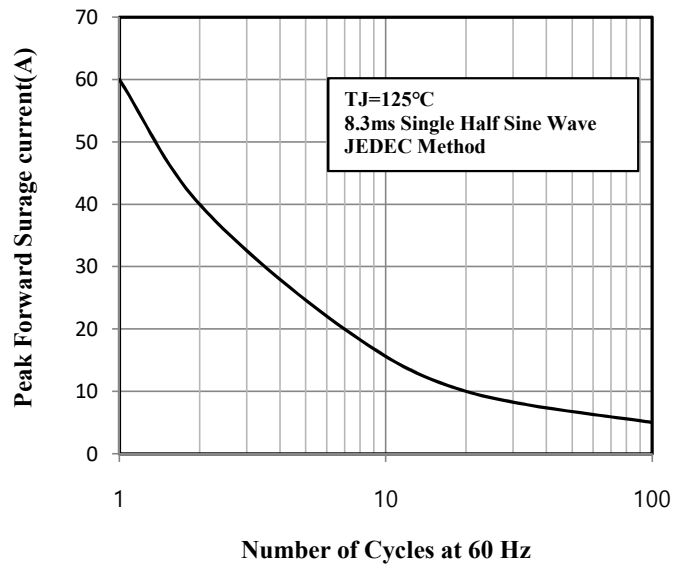
Note 1. Reverse Recovery Test Conditions :  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$   
Note 2. Measured at 1MHz and Applied Reverse Voltage of 4.0Volts D.C.

**Ratings and Characteristics Curves** ( $T_a=25^\circ\text{C}$  unless otherwise noted)

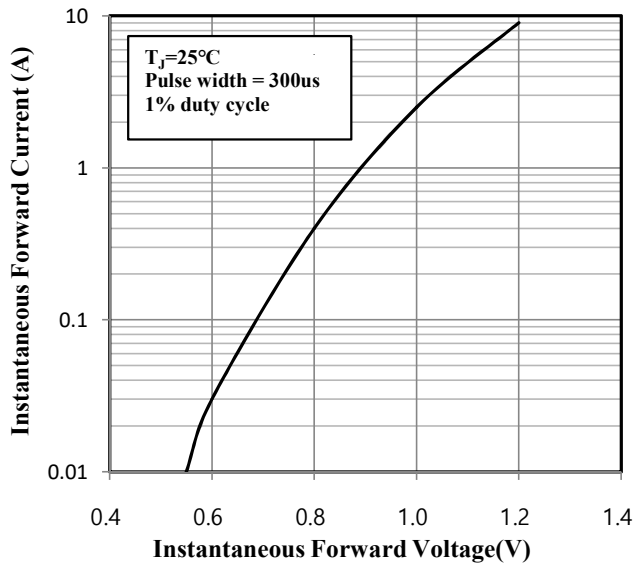
**Fig.1 Forward Current Derating Curve**



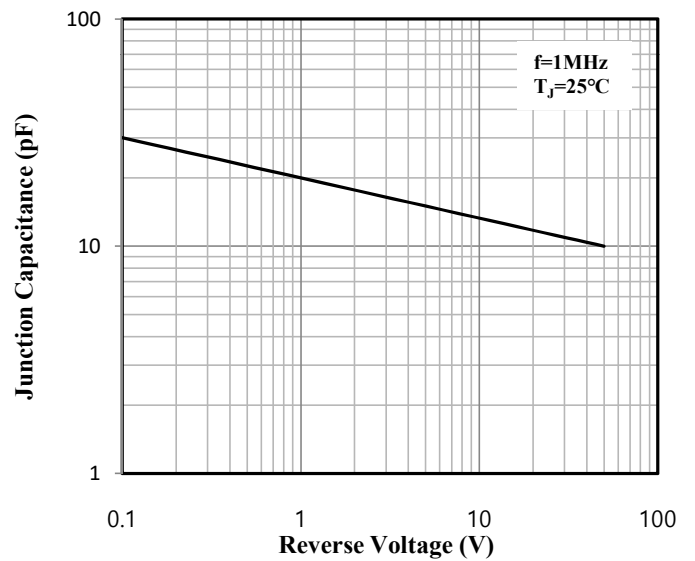
**Fig.2 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Junction Capacitance**



**Fig.5 Reverse Recovery Time Characteristic and Test Circuit Diagram**

