

# FR201G thru FR207PG

## Glass Passivated Junction Fast Switching Rectifiers Reverse Voltage 50 to 1000V Forward Current 2.0A

### Feature & Dimensions

- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* High temperature metallurgically bonded construction
- \* Glass passivated chip
- \* Capable of meeting environmental standards of MIL-S-19500
- \* 2.0 A operation at TA=55°C with no thermal runaway
- \* For use in high frequency rectifier circuits
- \* Fast switching for high efficiency
- \* Typical IR less than 1.0μA
- \* High temperature soldering guaranteed: 260°C/10 seconds
- \* 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

### 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:** 0.015 oz., 0.40 g

**Handling precaution:** None

### 1. Electrical Characteristic

#### Maximum & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	FR201 G	FR202 G	FR203 G	FR204 G	FR205 G	FR205P G	FR206 G	FR207 G	FR207 PG	Unit
device marking code		FR201 G	FR202 G	FR203 G	FR204 G	FR205 G	FR205P G	FR206 G	FR207 G	FR207 PG	
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	600	800	1000	1000	V
Maximum RSM voltage	$V_{RSM}$	35	70	140	280	420	420	560	700	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	600	800	1000	1000	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A = 55^\circ\text{C}$	$I_F(AV)$	2.0									A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	70									A
Maximum full load reverse current, full cycle average, 0.375" (9.5mm) lead lengths at $T_A = 55^\circ\text{C}$	$I_R(AV)$	100									μA
Typical thermal resistance (Note 2)	$R_{\theta JA}$	55									°C/W
Operating junction and storage temperature range	TJ, TSTG	-50 to +150									°C

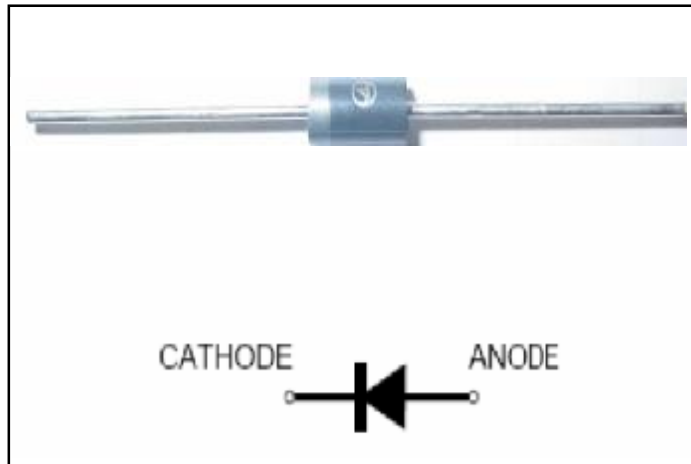
#### Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	FR201 G	FR202 G	FR203 G	FR204 G	FR205 G	FR205P G	FR206 G	FR207 G	FR207 PG	Unit
Maximum instantaneous forward voltage at 2.0A	$V_F$	1.3									V
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 125^\circ\text{C}$	$I_R$	5.0 200									μA
Typical reverse recovery time (Note 1)	trr	150			250		150	500		250	ns
Typical junction capacitance at 4.0V, 1MHz	CJ	35									PF

#### NOTES:

1.  $I_F = 0.5A$ ,  $I_R = 1.0A$ ,  $IRR = 0.25A$

2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted



We declare that the material of product compliance with ROHS requirements

# FR201G thru FR207PG

## 2. Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 - Forward Current Derating Curve

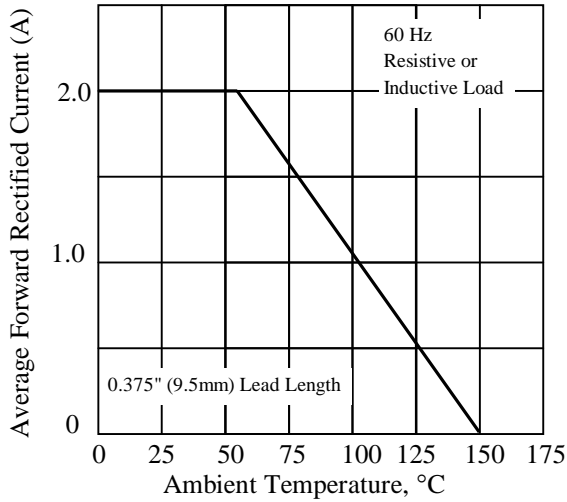


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

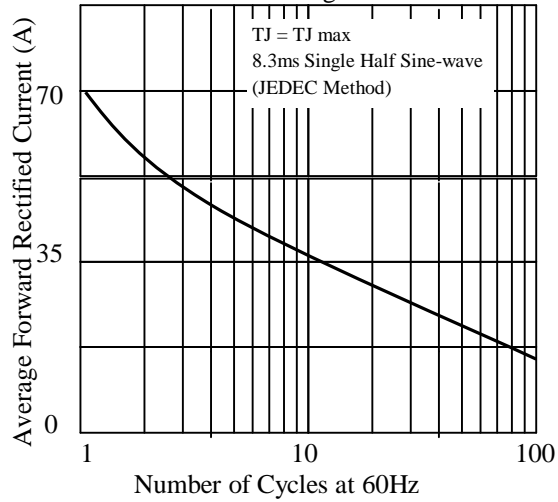


Fig. 3 - Typical Instantaneous Forward Characteristics

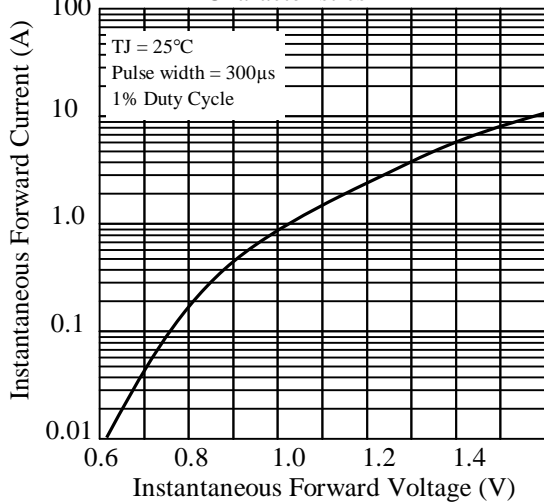


Fig. 4 - Typical Reverse Characteristics

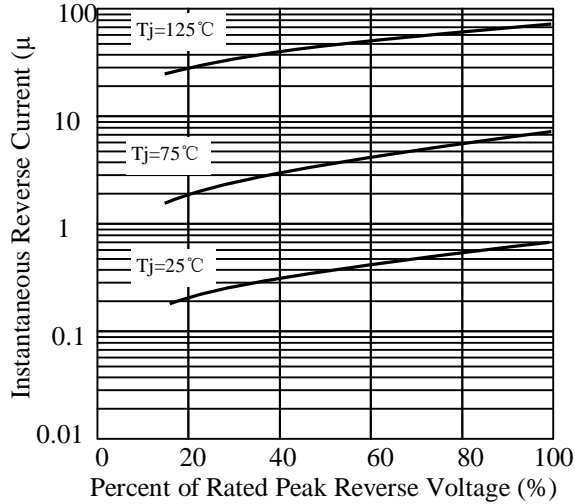


Fig. 5 - typical transient thermal impedance

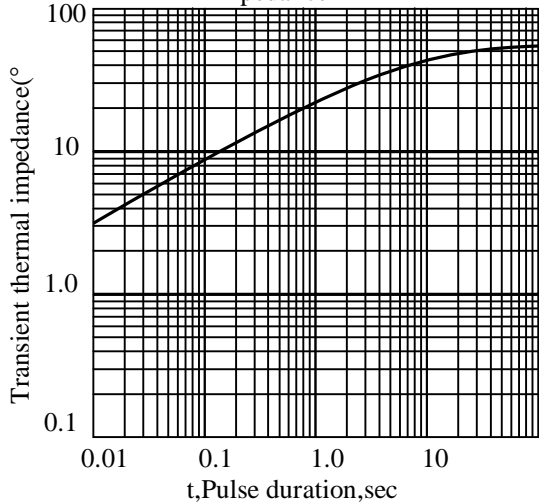
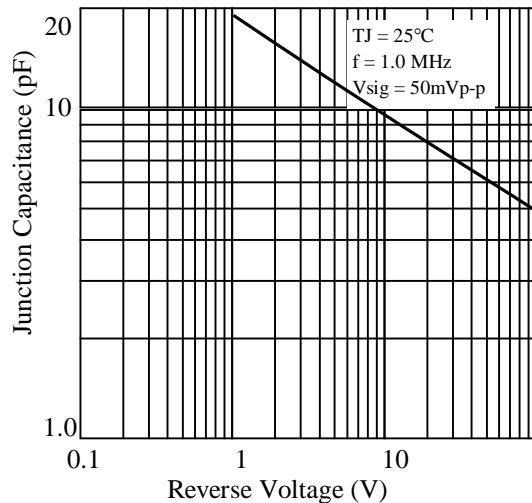
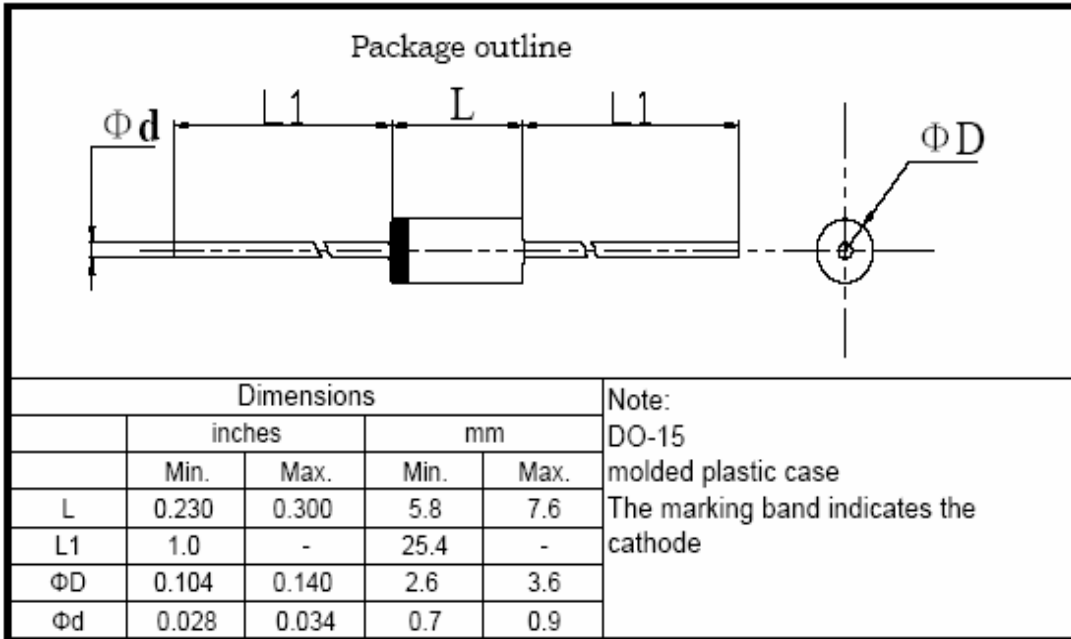


Fig. 6 - Typical Junction Capacitance



## FR201G thru FR207PG

### 3. dimension:



## FR201G thru FR207PG

### 4.Update Record

版次	更新记录	更新作者	更新日期
1	第一版	周杰	2012-1-9
2	更新版面	周杰	2012-8-2

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for* [Diodes - General Purpose, Power, Switching category:](#)

*Click to view products by* [Leshan manufacturer:](#)

Other Similar products are found below :

[MMBD3004S-13-F](#) [1N3611](#) [NTE156A](#) [NTE6244](#) [1SS400CST2RA](#) [SDAA13](#) [SHN2D02FUTW1T1G](#) [1N4449](#) [1N456A](#) [1N914BTR](#)  
[D291S45T](#) [BAS 16-02L E6327](#) [BAS 16-02V H6327](#) [BAS 21U E6327](#) [BAS 28 E6327](#) [BAW56DWQ-7-F](#) [BAW75-TAP](#) [MM230L-CAA](#)  
[IDW40E65D1](#) [JAN1N3600](#) [JAN1N4454UR-1](#) [SMMSD4148T3G](#) [BYW95B/A52A](#) [NSVDAN222T1G](#) [CDSZC01100-HF](#) [BAV70HDW-7](#)  
[BAS28-7](#) [JANTX1N6640](#) [BAW56HDW-13](#) [BAS28 TR](#) [VS-HFA04SD60STR-M3](#) [1SS388-TP](#) [BAV99TQ-13-F](#) [BAV99HDW-13](#) [1N4004](#)  
[MMDB30-E28X](#) [LS4148](#) [IDV15E65D2](#) [W0503RH200S0L](#) [W0503SH200S0L](#) [M0268SJ200NLF](#) [M0268RJ200NLF](#) [S3MBF](#) [US1J](#)  
[DAN217U-TP](#) [SHV-06JNS-Q](#) [IDW30C65D1](#) [IDW80C65D1](#) [VS-HFA30TA60CSR-M3](#) [M1MA152WAT1](#)