

## FR101G thru FR107G

### 1. Feature & Dimensions

- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* High temperature metallurgically bonded construction
- \* Cavity-free glass passivated junction
- \* Capable of meeting environmental standards of MIL-S-19500
- \* 1.0 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

### 2. 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

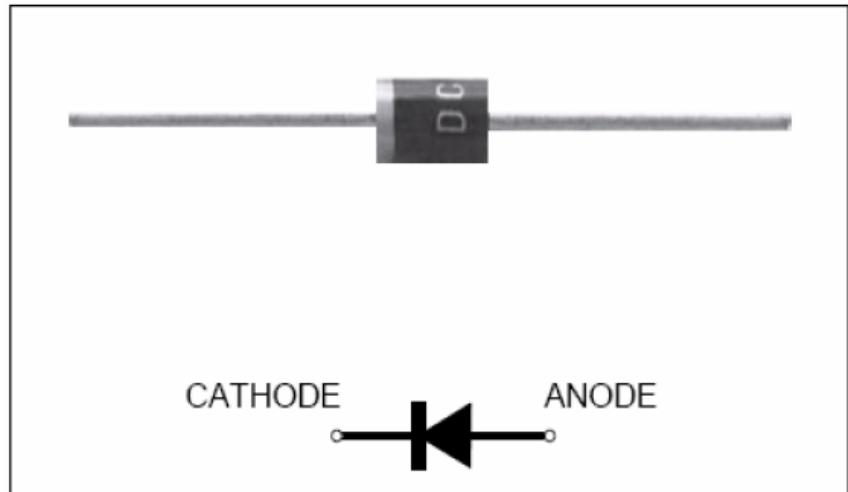
**Mounting Position:** Any

**Weight:** 0.011 oz., 0.284g

**Handling precaution:** None

### Glass Passivated Junction Fast Recovery Rectifiers

**Reverse Voltage 50 to 1000V  
Forward Current 1.0A**



We declare that the material of product  
compliance with RoHS requirements.

### 3. Electrical Characteristic

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

Parameter Symbol	symbol	FR 101G	FR 102G	FR 103G	FR 104G	FR 105G	FR105 PG	FR 106G	FR 107G	FR107 PG	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	600	800	1000	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	420	560	700	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	600	800	1000	1000	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at T <sub>A</sub> = 55°C	IF(AV)						1.0				A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>						30				A
Maximum full load reverse current, full cycle average, 0.375" (9.5mm) lead lengths at T <sub>A</sub> = 55°C	IR(AV)						100				µA
Typical thermal resistance (Note 2)	R <sub>θJA</sub>						55				°C/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>TSG</sub>						-50 to +150				°C

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

Parameter Symbol	symbol	FR 101G	FR 102G	FR 103G	FR 104G	FR 105G	FR105 PG	FR 106G	FR 107G	FR107 PG	Unit
Maximum instantaneous forward voltage at 1.0A	V <sub>F</sub>						1.3				V
Maximum DC reverse current T <sub>A</sub> = 25°C at rated DC blocking voltage T <sub>A</sub> = 125°C	IR						5.0				µA
Typical reverse recovery time (Note 1)	trr			150		250	150	500	250		ns
Typical junction capacitance at 4.0V, 1MHz	C <sub>J</sub>					15					PF

NOTES:

1. IF = 0.5A, IR = 1.0A, IRR = 0.25A
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

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

Fig. 1 - Forward Current Derating Curve

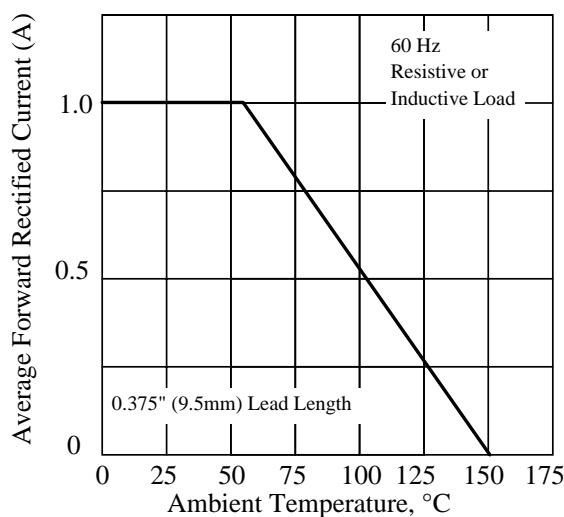


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

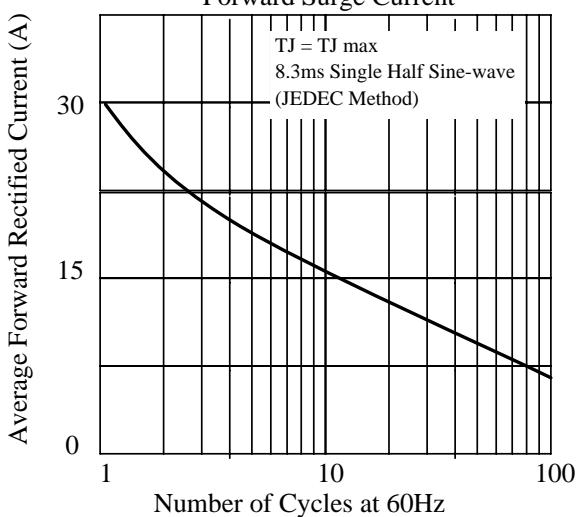


Fig 3. - Typical Instantaneous Forward Characteristics

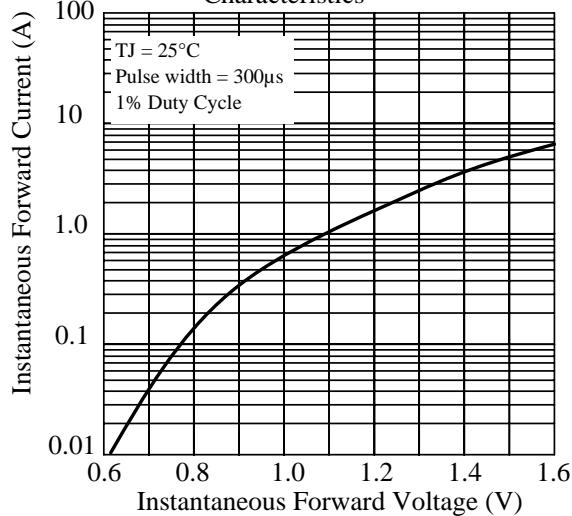


Fig 4. - Typical Reverse Characteristics

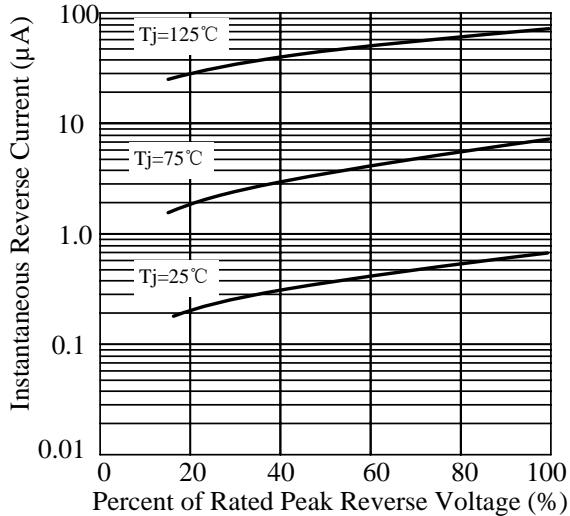


Fig 5. - typical transient thermal impedance

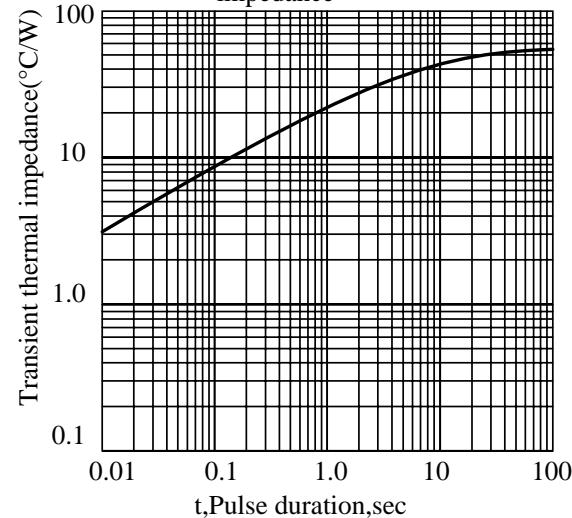
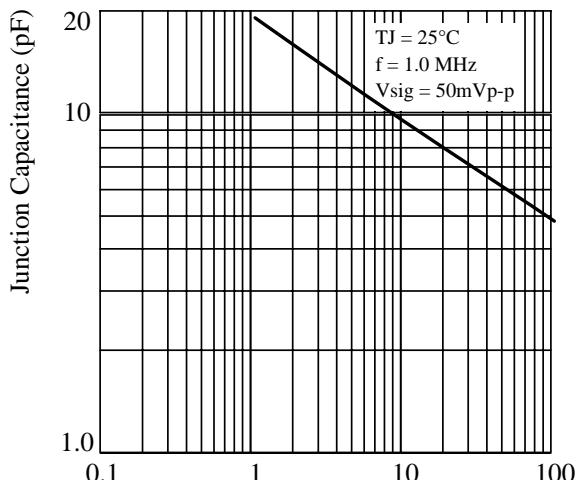
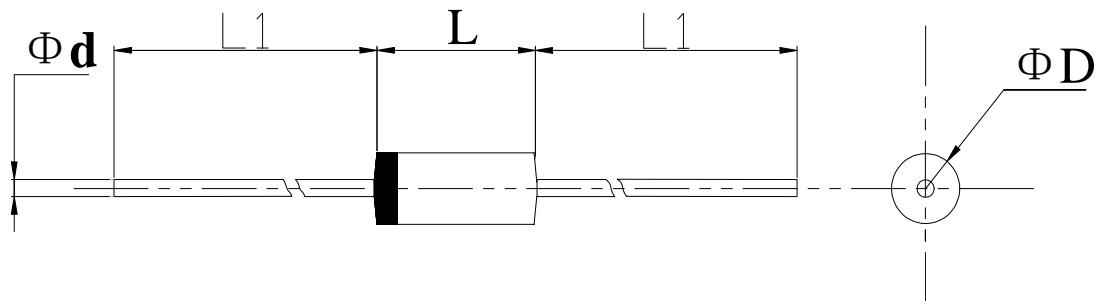


Fig 6. - Typical Junction Capacitance



## 5.Package Dimensions in inches and (millimeters)

Package outline



Dimensions				
	inches		mm	
	Min.	Max.	Min.	Max.
L	0.166	0.205	4.2	5.2
L1	1.0	-	25.4	-
ΦD	0.080	0.107	2.0	2.7
Φd	0.028	0.034	0.7	0.9

Note:  
DO-41  
molded plastic case  
The marking band indicates the cathode



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单击下面可查看定价，库存，交付和生命周期等信息

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