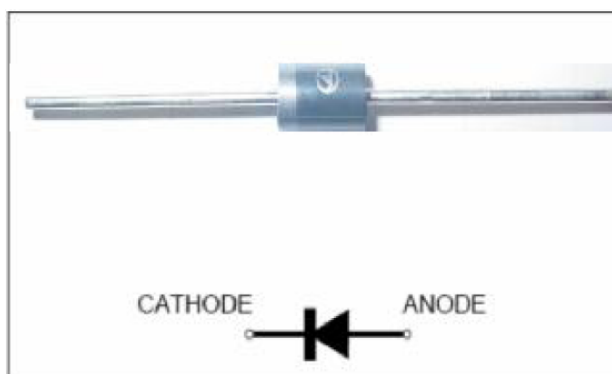


SF31G thru SF38G

Glass Passivated Junction Super Fast Plastic Rectifiers Reverse Voltage 50 to 600V Forward Current 3.0A

FEATURES

- * 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
- * For use in high frequency rectifier circuits
- * Fast switching for high efficiency
- * High temperature soldering guaranteed: 260°C/10 seconds
- * 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension



We declare that the material of product compliance with ROHS requirements

Mechanical Data

Case: JEDEC DO-201AD, molded plastic
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.038 oz., 1.03 g
Handling precaution: None

1. Electrical Characteristic

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

Parameter Symbol	symbol	SF31G	SF32G	SF33G	SF34G	SF35G	SF36G	SF38G	Unit
device marking code		SF31G	SF32G	SF33G	SF34G	SF35G	SF36G	SF38G	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RSM voltage	V_{RSM}	35	70	105	140	210	280	420	V
Maximum DC blocking voltage	V_{DC}	50	100	150	200	300	400	600	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A = 55^\circ\text{C}$	$I_{F(AV)}$	3.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							A
Maximum DC blocking voltage temperature	T_A	150							°C
Typical thermal resistance (Note 2)	$R_{\theta JA}$	20							°C/W
Operating junction temperature range	T_J	-50 to +150							°C
Storage temperature range	T_{STG}	-50 to +150							°C

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

Parameter Symbol	symbol	SF31G	SF32G	SF33G	SF34G	SF35G	SF36G	SF38G	Unit
Maximum instantaneous forward voltage at 3.0A	V_F	0.95			1.25		1.7		V
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_J = 125^\circ\text{C}$	I_R	10			200				μA
Typical reverse recovery time (Note 1)	t_{rr}	35							ns
Typical junction capacitance at 4.0V, 1MHz	C_J	50			30				PF

NOTES:

1. $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $IRR = 0.25\text{A}$
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

SF31G thru SF38G

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

Fig. 1 - Forward Current Derating Curve

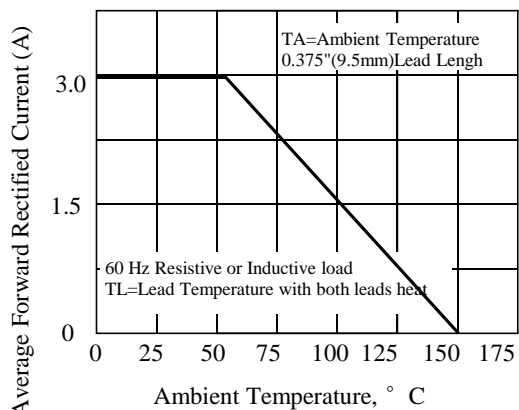


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

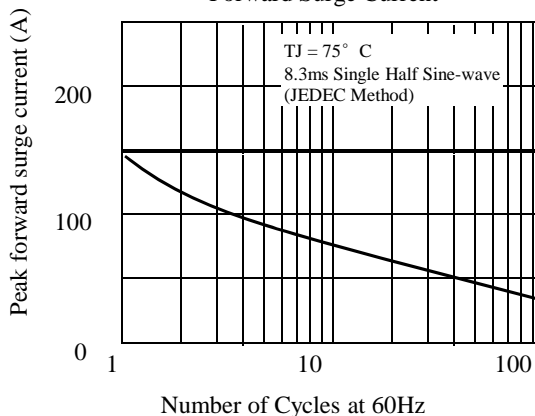


Fig 3. - Typical Instantaneous Forward Characteristics

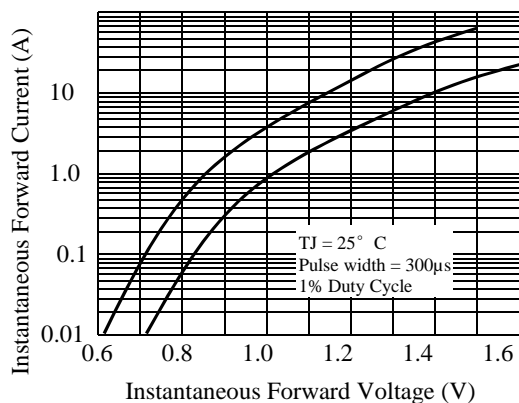


Fig 4. - Typical Reverse Characteristics

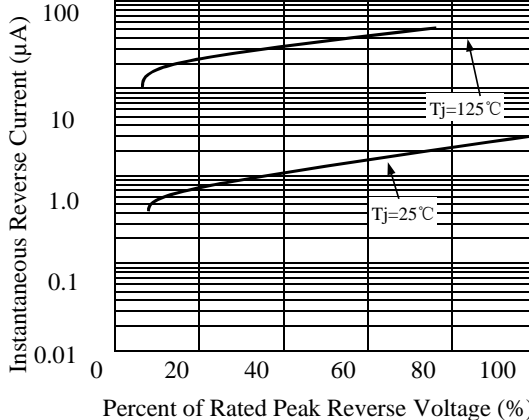


Fig 5. - typical transient thermal impedance

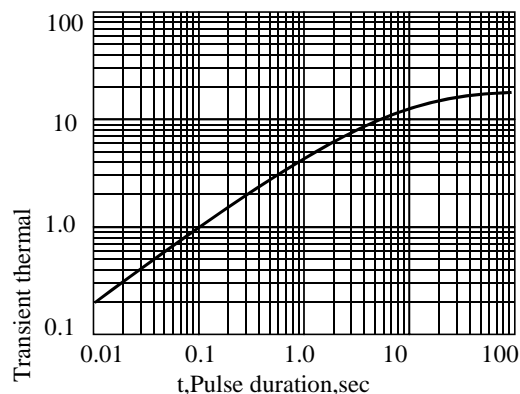
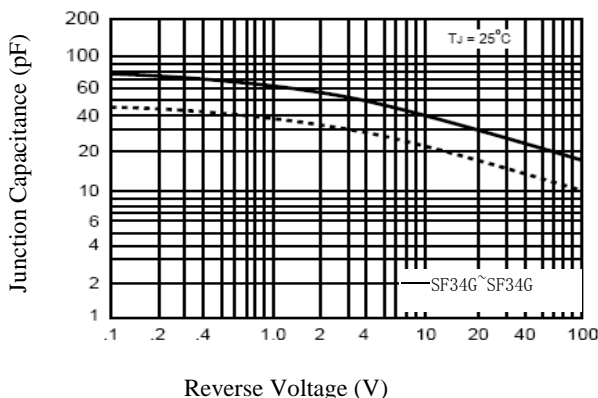
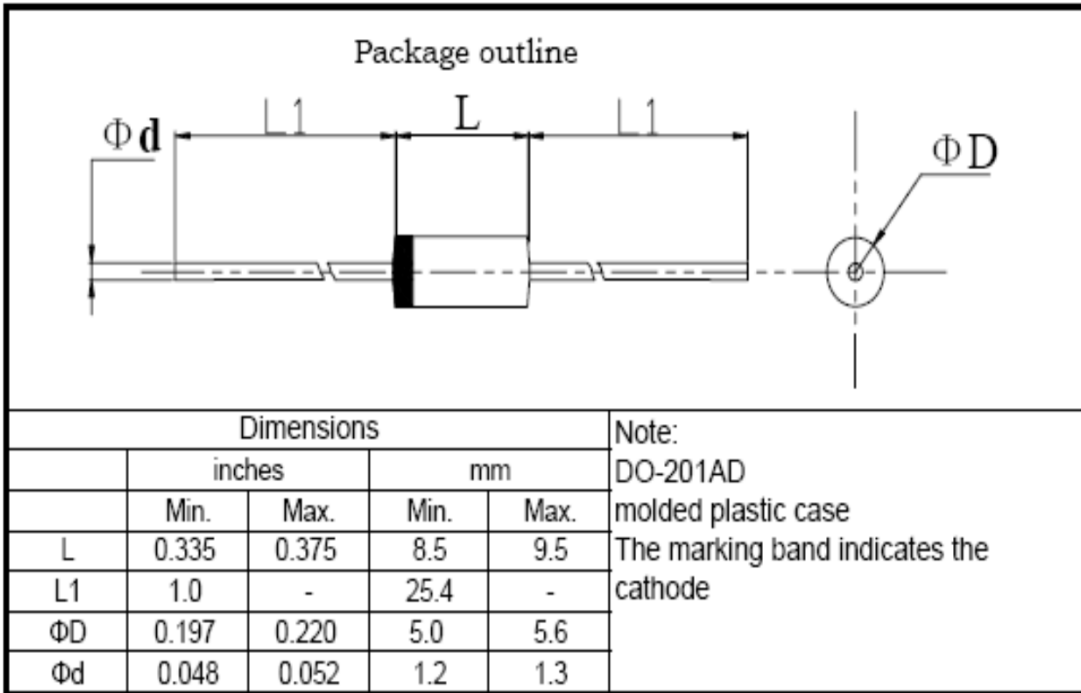


Fig 6. - Typical Junction Capacitance



SF31G thru SF38G

3. dimension:



SF31G thru SF38G

4. Update Record

版次	更新记录	更新作者	更新日期
1	第一版	余波	2010-11-8
2	修正TJ	余波	2011-11-16

单击下面可查看定价，库存，交付和生命周期等信息

[>>LRC\(乐山无线电\)](#)