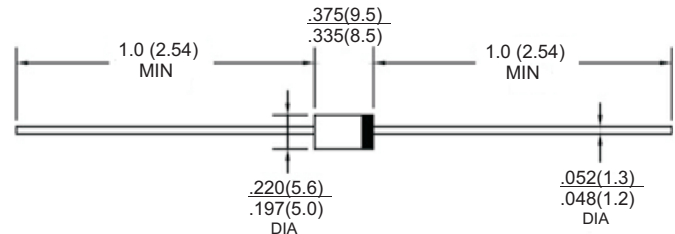


### FEATURES

- Available in glass passivated chip junction with G suffix
- Low forward voltage drop
- High current capability
- Fast recovery
- High surge current capability

### MECHANICAL DATA

- Molded plastic body (UL 94V-0 rated)
- Lead: Axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode end
- High temperature soldering 250°C/10 seconds
- Weight: 1.20 gram



DO-201AD

Dimensions in inches and (millimeters)

### MAXIMUM RATINGS & 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%

Parameter	Symbol	SF31(G)	SF32(G)	SF33(G)	SF34(G)	SF35(G)	SF36(G)	SF37(G)	SF38(G)	Unit
		EGP30A	EGP30B	EGP30C	EGP30D	EGP30F	EGP30G		EGP30J	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	150	200	300	400	500	600	V
Maximum RMS Voltage	$V_{RMS}$	35	70	105	140	210	280	350	420	V
Maximum DC blocking Voltage	$V_{DC}$	50	100	150	200	300	400	500	600	V
Maximum Average Forward Rectified Current .375" (9.5mm) Lead length @ $T_A=55^\circ\text{C}$	$I_{F(AV)}$	3.0								A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	125								A
Maximum Instantaneous Forward Voltage @ 3.0A	$V_F$	0.95			1.3		1.7			V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at rated DC Blocking voltage @ $T_A=100^\circ\text{C}$	$I_R$	5.0				50				$\mu\text{A}$
Maximum Reverse Recovery Time (Note 1)	$T_{RR}$	35								nS
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	30								$^\circ\text{C/W}$
Operating Temperature Range	$T_J$	-55 to + 125 / -55 to +150 for (G)								$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to + 150								$^\circ\text{C}$

**NOTE:** 1. Reverse Recovery Test conditions:  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{RR}=0.25\text{A}$ .

2. Mounted on Cu-Pad Size 16mm x 16mm on P.C.B.

**RATING & CHARACTERISTIC CURVES**

FIG.1-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

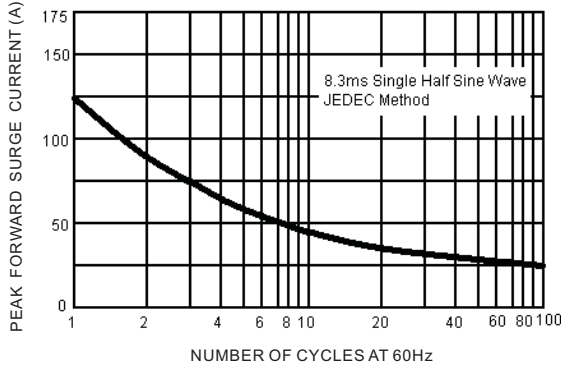


FIG.2-MAXIMUM FORWARD CURRENT DERATING

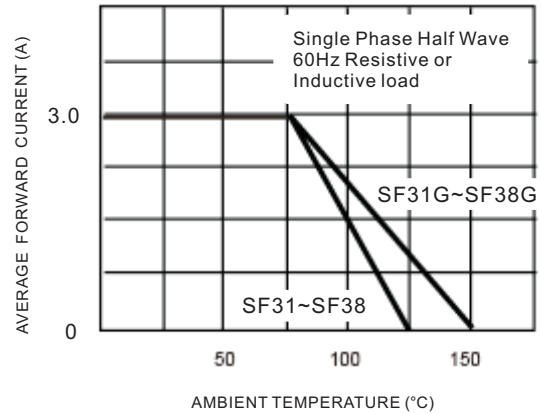


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

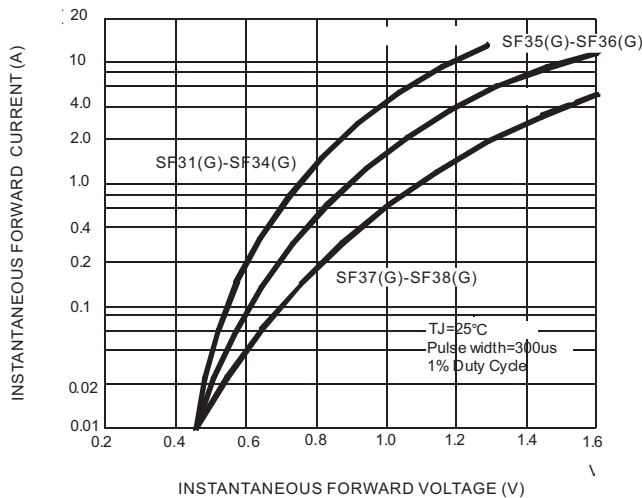


FIG.4-TYPICAL REVERSE CHARACTERISTICS

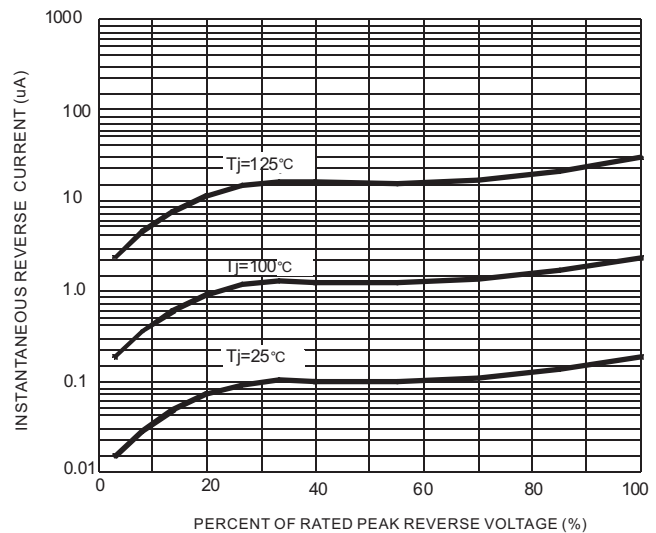
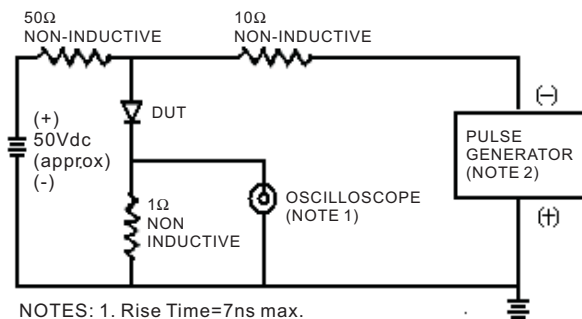


FIG.5-REVERSE RECOVER TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES: 1. Rise Time=7ns max.  
Input Impedance=1megohm 22pF  
2. Rise Time=10ns max.  
Source Impedance=50 ohms.

