

DESCRIPTION

The GLF9011 are a family of ultra-efficient IQSmart™ low dropout regulators designed for wearables and IoT devices which require ultra-low quiescent current.

The GLF9011 provides up to 150 mA output current with typical quiescent current of only 0.4 μ A. In shutdown mode, the GLF9011 only draws a typical 4 nA from the supply. The typical dropout voltage is 62 mV or less in each output voltage rating.

The GLF9011 also provides short circuit current limiting of 250 mA and fast transient response from zero to maximum load. The combination of low power, protection features and small size make the GLF9011 ideal for portable and battery powered applications.

The GLF9011 is available in 0.97 mm x 0.97 mm x 0.55 mm wafer level chip scale package (WLCSP).

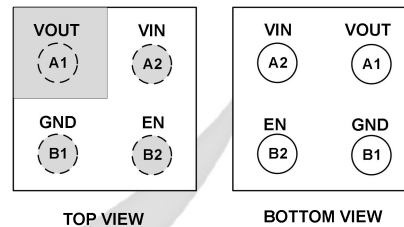
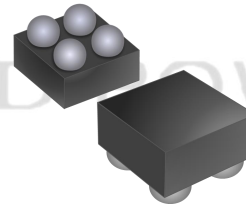
APPLICATIONS

- Battery Powered Smart Devices
- Medical Devices
- Mobiles / Wearables / IoT Devices

FEATURES

- Ultra-Low Quiescent Current, I_Q :
 - 0.4 μ A Typ at no load
- Ultra-Low Shutdown Current, I_{SD} :
 - 10 nA Max at $V_{IN}=V_{OUT(NOM)} + 1$ V
- Operation Voltage Rating: $V_{OUT}+1$ V $\leq V_{IN} \leq 5.5$ V
- Output Voltage Accuracy: ± 2.5 %
- Low Dropout: 62 mV Typ at 150 mA
- 150 mA Guaranteed Output Current
- Over Current Protection and Current Foldback
- Compatible with Ceramic Capacitor
- Operating Temperature Range: -40 °C to 85 °C
- HBM: 6 kV, CDM: 2 kV
- Ultra-Small: 0.97 mm x 0.97 mm WLCSP

PACKAGE

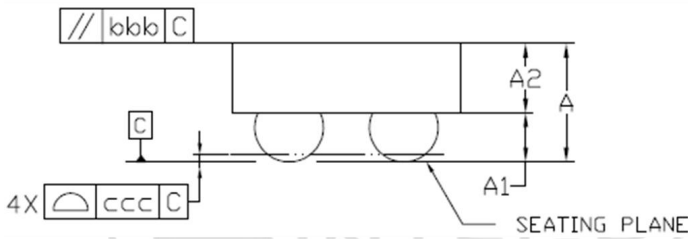
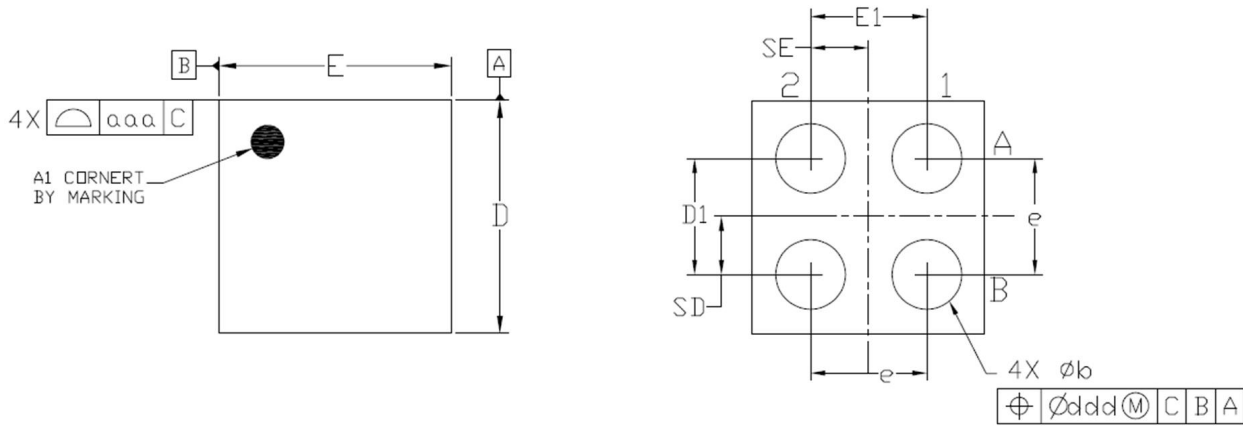


0.97 mm x 0.97 mm x 0.55 mm WLCSP

DEVICE ORDERING INFORMATION

Part Number	Top Mark	Output Voltage (V)	Package	Tape and Reel Packaging
GLF9011-18S2G7	BP	1.8	0.97 mm x 0.97 mm x 0.55 mm WLCSP	3000 Pieces on 7 inch reel
GLF9011-28S2G7	BQ	2.8		
GLF9011-30S2G7	BR	3.0		

PACKAGE OUTLINE

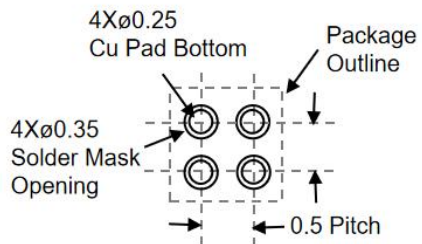


Dimensional Ref.			
REF.	Min.	Nom.	Max.
A	0.500	0.550	0.600
A1	0.225	0.250	0.275
A2	0.275	0.300	0.325
D	0.960	0.970	0.985
E	0.960	0.970	0.985
D1	0.450	0.500	0.550
E1	0.450	0.500	0.550
b	0.260	0.310	0.360
e	0.500 BSC		
SD	0.250 BSC		
SE	0.250 BSC		
Tol. of Form&Position			
aaa	0.10		
bbb	0.10		
ccc	0.05		
ddd	0.05		

Notes

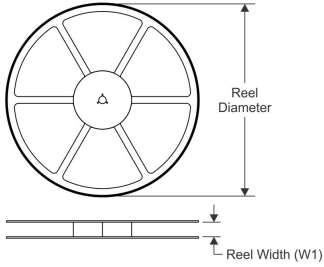
1. ALL DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES).
2. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.

Recommended Footprint

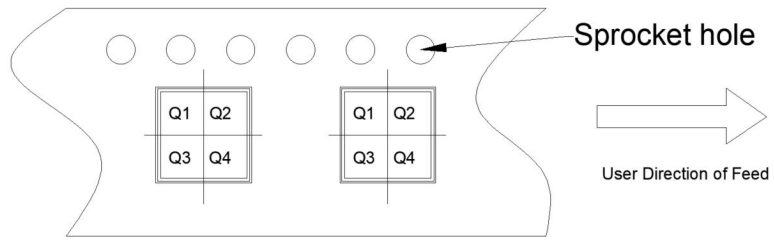


TAPE AND REEL INFORMATION

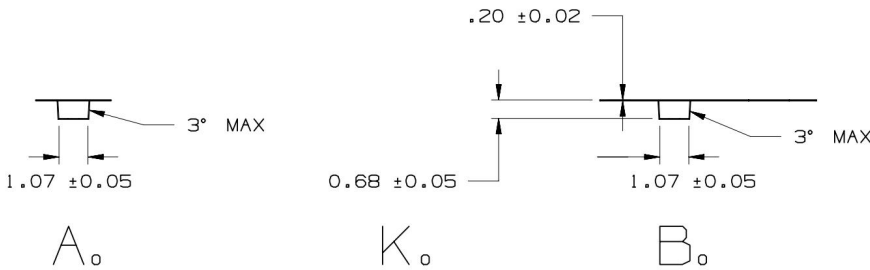
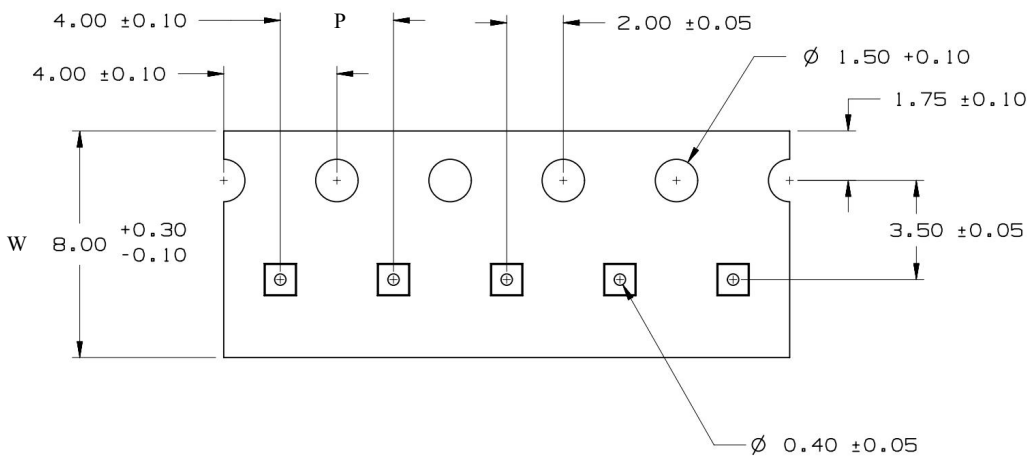
REEL DIMENSIONS



QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE



TAPE DIMENSIONS



Device	Package	Pins	SPQ	Reel Diameter (mm)	Reel Width W1	A0	B0	K0	P	W	Pin1
GLF9011-18S2G7	WLCSP	4	3000	180	9	1.07	1.07	0.68	4	8	Q1
GLF9011-28S2G7	WLCSP	4	3000	180	9	1.07	1.07	0.68	4	8	Q1
GLF9011-30S2G7	WLCSP	4	3000	180	9	1.07	1.07	0.68	4	8	Q1

Remark:

A0: Dimension designed to accommodate the component width

B0: Dimension designed to accommodate the component length

C0: Dimension designed to accommodate the component thickness

W: Overall width of the carrier tape

P: Pitch between successive cavity centers