

DESCRIPTION

The GLF112x is an ultra-efficiency, 1.0 A rated, integrated load switch with the slew rate control. The best-in-class efficiency makes it an ideal choice for use in IoT, mobile, and wearable electronics.

The GLF112x features an ultra-efficient IqSmart™ technology that supports the lowest quiescent current (I_Q) and shutdown current (I_{SD}) in the industry. Low I_Q and I_{SD} solutions help designers to reduce parasitic leakage current, improve system efficiency, and increase battery lifetime.

The integrated slew rate control can also enhance system reliability by mitigating bus voltage swings during switching events. Where uncontrolled switches can generate high inrush currents that result in voltage droop and/or bus reset events, the GLF112x slew rate control specifically limits inrush current during turn-on to minimize voltage droop.

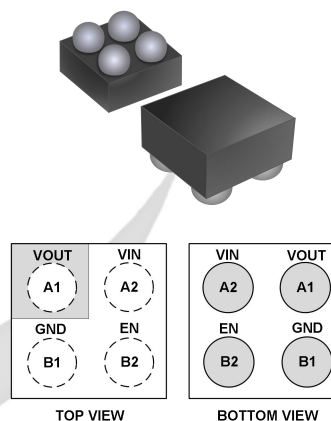
FEATURES

- Wide Input Range, $V_{IN} = 1.1\text{ V}$ to 5.5 V
6 V_{ABS} Max
- I_{OUT} Max = 1.0 A
- Low $R_{ON} = 52\text{ m}\Omega$ Typ. at 5.5 V_{IN}
- Ultra-Low I_Q :
1.0 nA Typ at 5.5 V_{IN} : GLF112xH / HN
550 nA Typ at 5.5 V_{IN} : GLF1121L
- Ultra-Low I_{SD} : 10 nA Typ at 5.5 V_{IN}
- Integrated Output Discharge Switch (Optional)
- Internal Pull-down Resistor on EN Pin: GLF112xH
- Internal Pull-up Resistor on EN Pin: GLF112xL

APPLICATIONS

- Wearables
- Mobile Devices
- Low Power Subsystems

PACKAGE

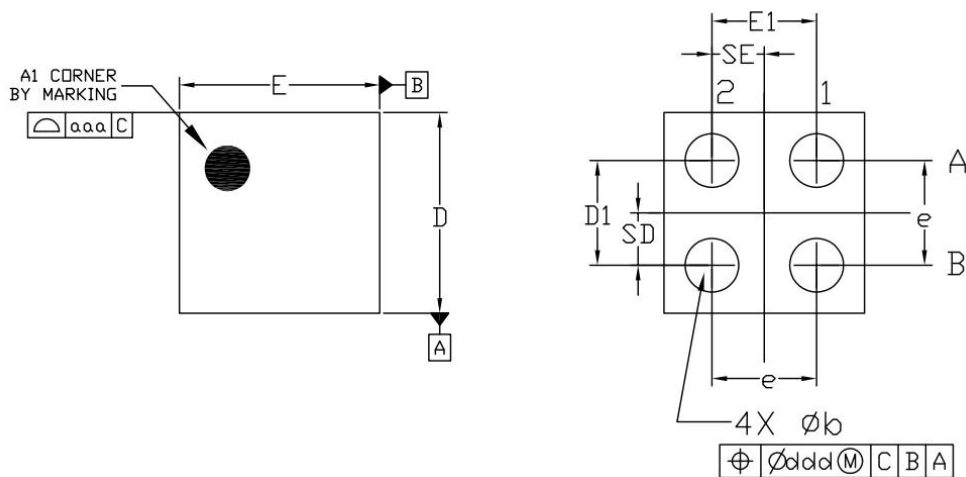


0.67 mm x 0.67 mm x 0.425 mm
0.35 mm Pitch WLCSP

ALTERNATE DEVICE OPTIONS

Part Number	Top Mark	R _{ON} (Typ) at V _{IN} (MAX)	V _{OUT} Rise Time at 3.3 V _{IN}	Output Discharge	EN Activity	Internal Pull up/down
GLF1120H	T	52 mΩ	380 μs	NA	High	Yes
GLF1121H	U			85 Ω		Yes
GLF1121HN	V					NA
GLF1121L	X		Low		Yes	
GLF1123H	W		4 μs	High	Yes	

PACKAGE OUTLINE



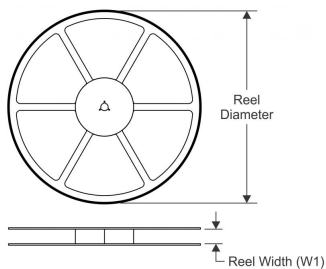
Dimensional Ref.			
REF.	Min.	Nom.	Max.
A	0.380	0.425	0.470
A1	0.085	0.100	0.115
A2	0.275	0.300	0.325
A3	0.020	0.025	0.030
D	0.655	0.670	0.685
E	0.655	0.670	0.685
D1	0.300	0.350	0.400
E1	0.300	0.350	0.400
b	0.145	0.180	0.215
e	0.350 BSC		
SD	0.175 BSC		
SE	0.175 BSC		
Tol. of Form&Position			
aaa	0.10		
bbb	0.10		
ccc	0.05		
ddd	0.05		

Notes

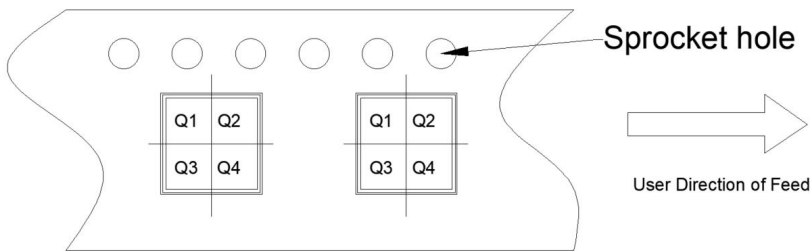
1. ALL DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES)
2. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.
3. A3: BACKSIDE LAMINATION

TAPE AND REEL INFORMATION

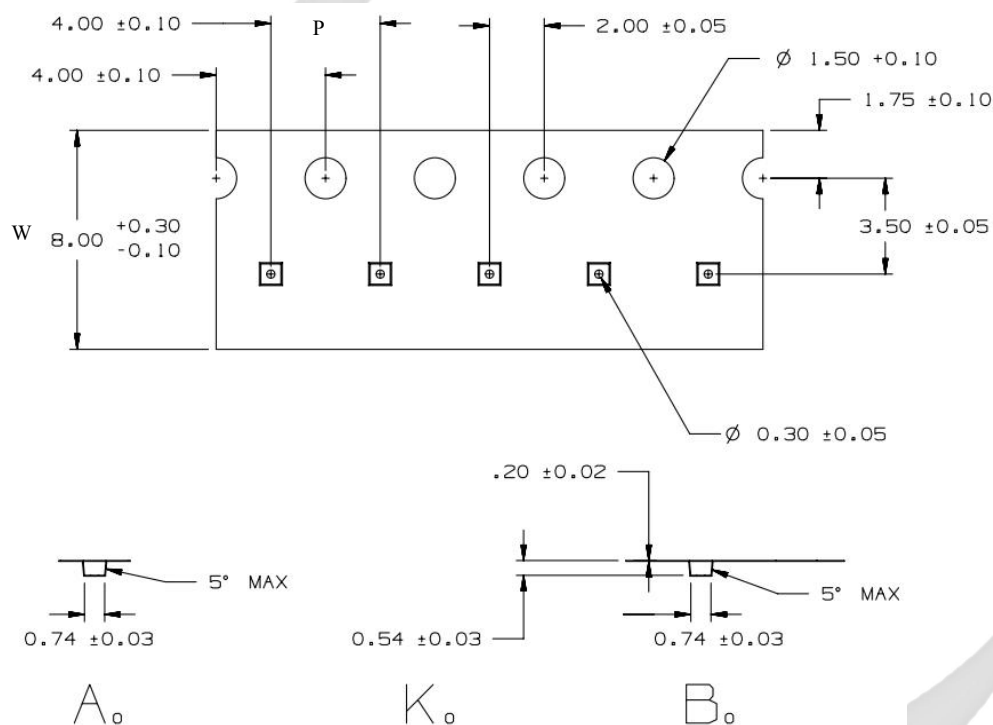
REEL DIMENSIONS



QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE



TAPE DIMENSIONS



Device	Package	Pins	SPQ	Reel Diameter (mm)	Reel Width W1	A0	B0	K0	P	W	Pin1
GLF1120H	WLCSP	4	4000	180	9	0.74	0.74	0.54	4	8	Q1
GLF1121H	WLCSP	4	4000	180	9	0.74	0.74	0.54	4	8	Q1
GLF1121HN	WLCSP	4	4000	180	9	0.74	0.74	0.54	4	8	Q1
GLF1121L	WLCSP	4	4000	180	9	0.74	0.74	0.54	4	8	Q1
GLF1123H	WLCSP	4	4000	180	9	0.74	0.74	0.54	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