

DESCRIPTION

The GLF1561 is an integrated load switch with a programmable slew rate control to provide variable output voltage rising time by an external capacitor to minimize inrush current and stabilize an input power source.

The GLF1561 operates in an input range from 0.6 V to 5.5 V and supports 12 A maximum continuous output current. The GLF1561 feature supports low R_{ON} , quiescent current (I_{Q_BIAS}) and shutdown current (I_{SD_BIAS}) which improve system efficiency. An output discharge switch is integrated to discharge output capacitors when the GLF1561 is turned off.

The GLF1561 features an ultra-efficient EN pin function. With the EN pin open, the GLF1561 remains the off state. When the EN pin is asserted high, the EN pin leakage current is less than 180 nA at the full operating temperature range.

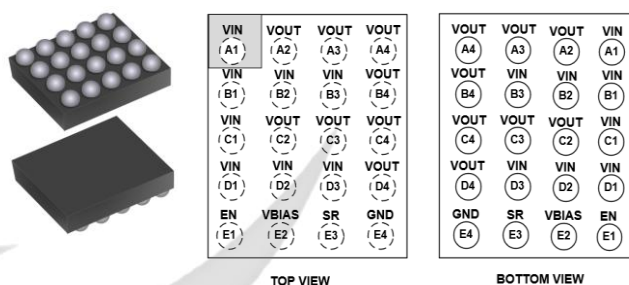
FEATURES

- V_{IN} Voltage Range: 0.6 V to 5.5 V
- V_{BIAS} Voltage Range: 1.8 V to 5.5 V
- 12 A Continuous Output Current
- Low R_{ON} : 4.5 m Ω Typ
- Low Quiescent Current, I_{Q_BIAS}
 - 7.6 μ A Typ at $V_{BIAS} = 5.5$ V
- Low Shutdown Current, I_{SD_BIAS}
 - 4 nA Typ at $V_{BIAS} = 5.5$ V
- Low Shutdown Current, I_{SD_VIN}
 - 42 nA Typ at $V_{IN} = 5.5$ V
- Programmable V_{OUT} Rising Time
- Ultra Efficient EN Pin and Low Leakage Current, I_{EN}
 - I_{EN} : 180 nA Max at $V_{EN} > V_{IH}$, Temperature Range
- Output Discharge Switch When Disabled
- Thermal Shutdown Protection

APPLICATIONS

- Optical Transceiver module
- Notebook / Industrial Computing Devices
- Communication / Network System
- Storage Devices

PACKAGE



1.77 mm x 2.17 mm WLCSP-20B

APPLICATION DIAGRAM

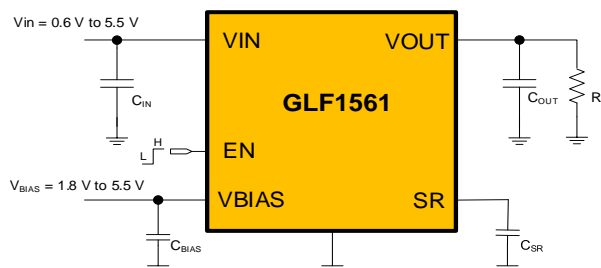
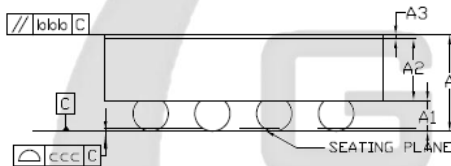
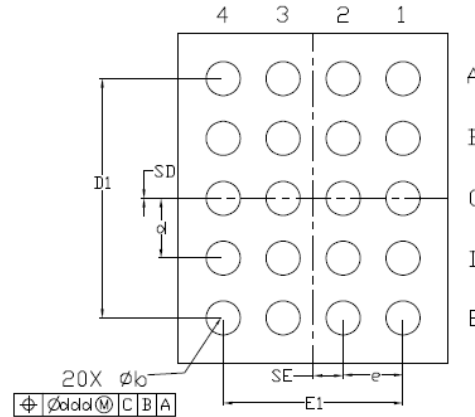
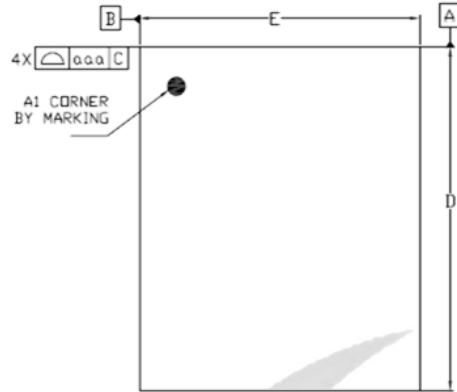


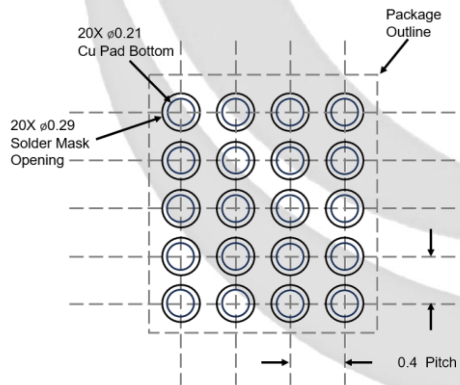
Figure 1. Application diagram

PACKAGE OUTLINE



Dimensional Ref.			
REF.	Min.	Nom.	Max.
A	0.573	0.623	0.673
A1	0.173	0.198	0.223
A2	0.375	0.400	0.425
A3	0.020	0.025	0.030
D	2.155	2.170	2.185
E	1.755	1.770	1.785
D1	1.550	1.600	1.650
E1	1.150	1.200	1.250
b	0.225	0.265	0.305
d	0.400 BSC		
e	0.400 BSC		
SD	0.000 BSC		
SE	0.200 BSC		
Tol. of Form&Position			
aaa	0.10		
bbb	0.10		
ccc	0.05		
ddd	0.05		

Recommended Footprint



Notes

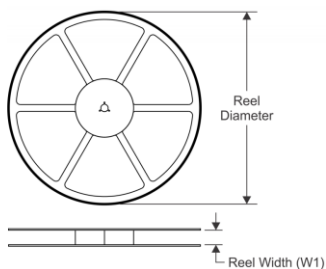
1. ALL DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES)
2. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.

PACKAGING INFORMATION

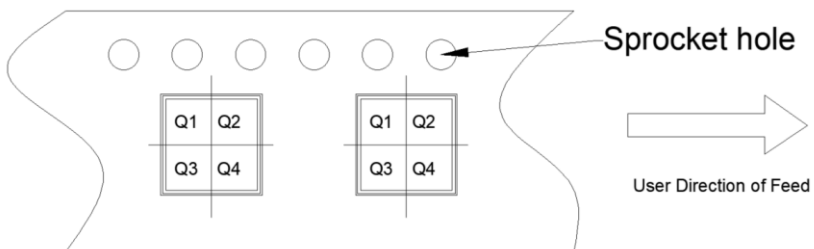
Part Number	Package	Pins	Pitch	Top Mark	Moisture Sensitivity Level	Environmental Information
GLF1561-HS7G7	WLCSP	20	0.40mm	FP	MSL1	ROHS+HF

TAPE AND REEL INFORMATION

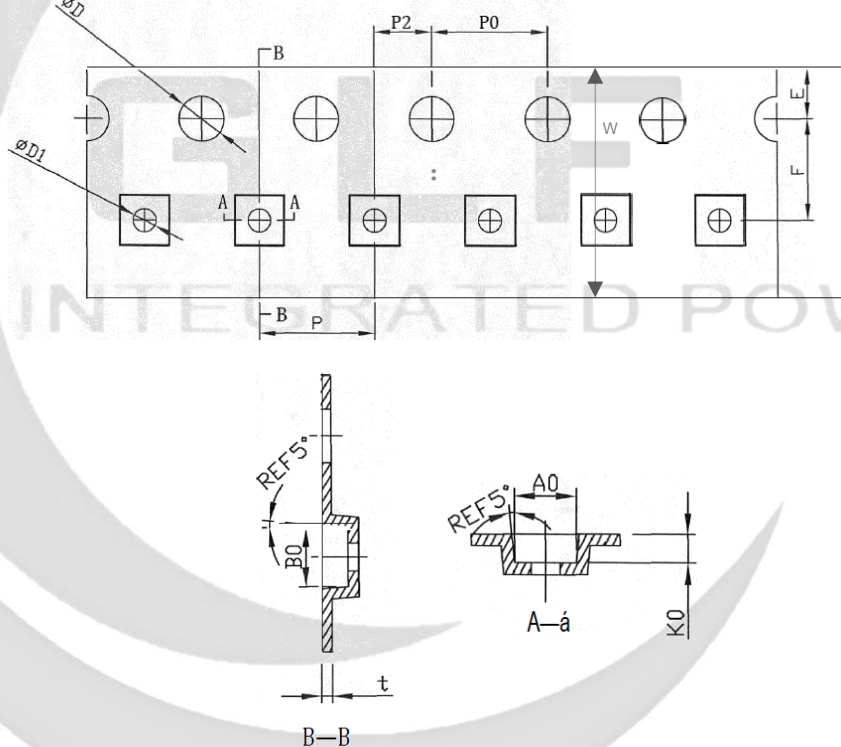
REEL DIMENSIONS



QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE



TAPE DIMENSIONS



Device	Package	Pins	SPQ	Reel Diameter (mm)	Reel Width W1	A0	B0	K0	P	W	Pin1
GLF1561-HS7G7	WLCSP	20	3000	178	9	1.95	2.3	0.75	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