

#### DESCRIPTION

The GLF4020 is an integrated power multiplexer switch with dual independent power switches connected to a single output pin to enable seamless transition between two input sources.

The GLF4020 provides an automatic selection mode as well as a manual selection mode by the combination of the logic input pins of EN and SEL. The EN input pin is used along with the select (SEL) input pin to select the automatic switching function, select VIN1 only, select VIN2 only, or turn both switches off. In the automatic selection mode, the GLF4020 automatically selects the higher input voltage source out of two input DC power supplies.

The GLF4020 features an ultra-efficient  $I_{QSmart}^{\text{TM}}$  technology that offers quiescent current ( $I_Q$ ) and shutdown current ( $I_{SD}$ ) in the industry. Low  $R_{ON}$  reduces conduction losses while low  $I_Q$  and  $I_{SD}$  solutions help designers to reduce parasitic leakage current, improve system efficiency, and increase battery lifetime.

The GLF4020 blocks any cross-conduction current between two input power sources. When the switch is disabled, the GLF4020 prevents the reverse current to the input source from the output at any higher  $V_{out}$  than  $V_{in}$  condition.

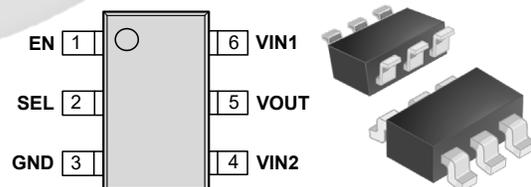
#### FEATURES

- Two-Input and Single-Output Power Multiplexer Switch
- Automatic and Manual Input Selection Mode
- Supply Voltage Range: 2.5 V to 6.5 V  
 $7.0 V_{Abs} \text{ Max}$
- $R_{ON}$  : 92 m $\Omega$  Typ. at 6.5  $V_{IN1}$  or  $V_{IN2}$   
105 m $\Omega$  Typ. at 4.5  $V_{IN1}$  or  $V_{IN2}$
- 2 A Continuous Output Current Capability Per Channel
- Ultra-Low Supply Current at Operation  
 $I_Q$  : 4  $\mu\text{A}$  Typ at 6.5  $V_{IN}$
- Ultra-Low Stand-by Current  
 $I_{SD}$  : 6 nA Typ at 6.5  $V_{IN}$
- Smart Control Pins  
 $I_{EN}$  and  $I_{SEL}$  : 3 nA Typ at  $V_{EN}$  or  $V_{SEL} > V_{IH}$   
 $R_{EN}$  and  $R_{SEL}$  : 500 k $\Omega$  Typ
- No Cross Conduction Between Two Inputs
- Reverse Current Blocking when Disabled
- Operating Temperature Range: -40 °C to 85 °C
- HBM: 6 kV, CDM: 2 kV

#### APPLICATIONS

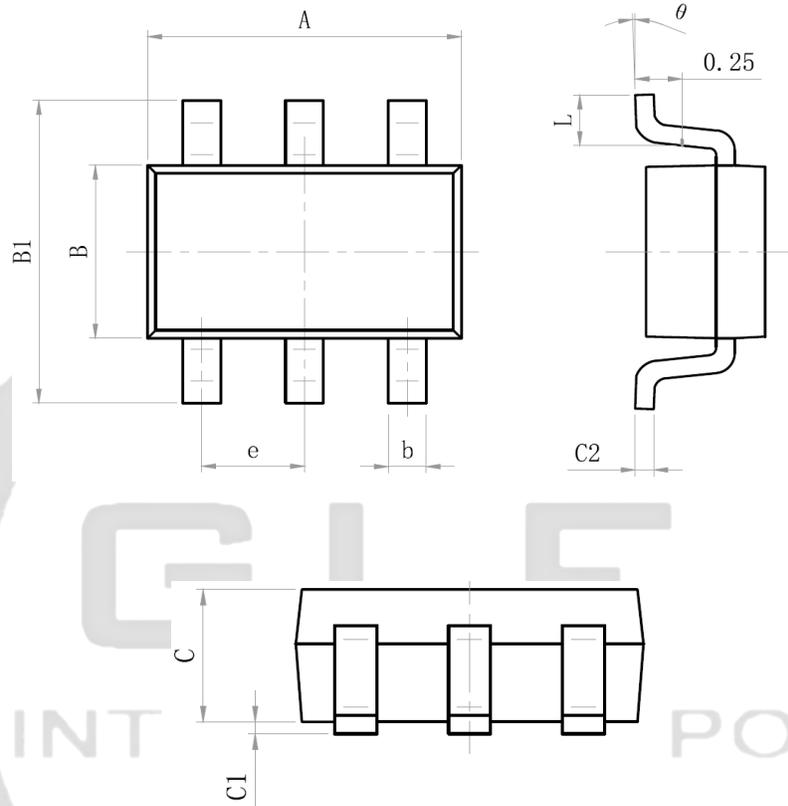
- Smart Devices
- Smart Home Electronics

#### PACKAGE



SOT23-6L

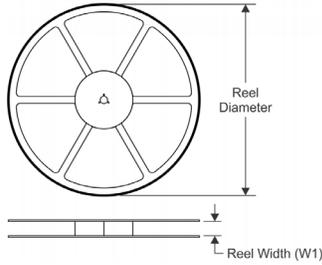
**PACKAGE OUTLINE**



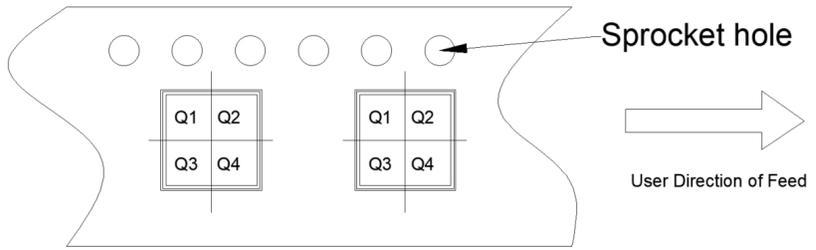
Size Mark	Min (mm)	Max (mm)	Size Mark	Min (mm)	Max (mm)
A	2.82	3.02	C	1.05	1.15
e	0.95 (BSC)		C1	0.03	0.15
b	0.28	0.45	C2	0.12	0.23
B	1.50	1.70	L	0.35	0.55
B1	2.60	3.00	theta	0°	8°

**TAPE AND REEL INFORMATION**

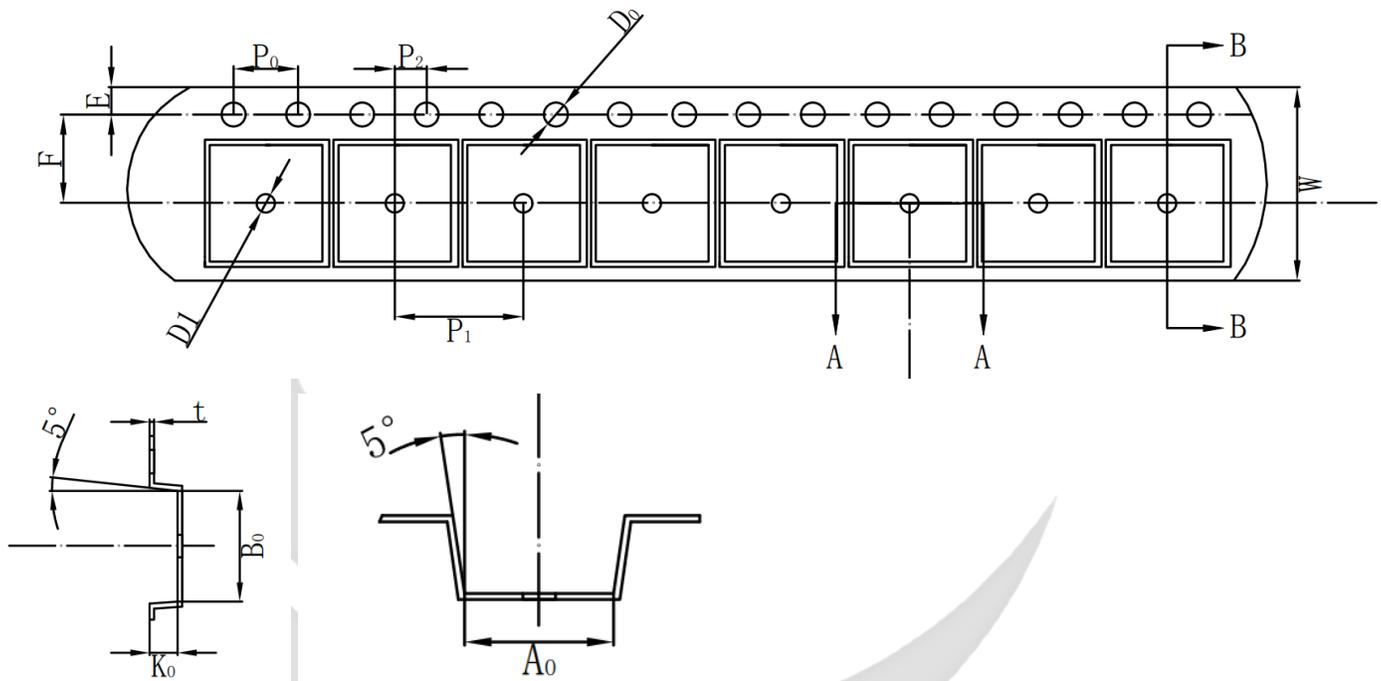
**REEL DIMENSIONS**



**QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE**



**TAPE DIMENSIONS**



Device	Package	Pins	SPQ	Reel Diameter(mm)	Reel Width W1	A0	B0	K0	P1	W	Pin1
GLF4020-T2G7	SOT23-6	6	3000	178	9	3.25	3.30	1.38	4	8	Q3

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
- P1: Pitch between successive cavity centers