

DESCRIPTION

The GLF4003 is an integrated power multiplexer IC with dual independent power switches connected to a single output pin to enable seamless transition between two input sources. The GLF4003 features asymmetrical power FET characteristics. Channel 1 (VIN1) provides lower conduction resistance to support 2.0 A continuous current capability. The current rating of another channel (VIN2) is 1.5 A. It is an ideal solution for a power system with an internal back up power source.

The GLF4003 provides an automatic selection, a manual selection and VIN1 priority selection mode. The switching of these three modes is executed by combining the EN and SEL pin settings. The EN input pin has an internal threshold voltage to offer a preference to select the channel 1 (VIN1) power source. In the automatic input selection mode, the GLF4003 automatically selects a higher input voltage source between two input power sources.

The GLF4003 prevents cross conduction current between two input sources. When VOUT is higher than VIN, the GLF4003 prevents the reverse current from the output to the input, no matter which input supply is applied.

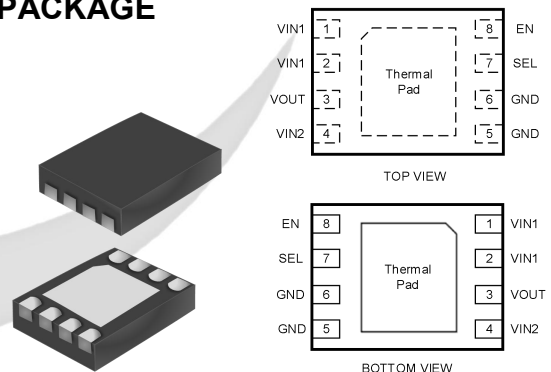
APPLICATIONS

- Smart Devices
- Subsystem with Backup Power
- IoT Tracking System
- Communication / Network System
- E-Meters and Motor Drives

FEATURES

- Two-Input and Single-Output Power Multiplexer IC
- Auto and Manual Input Selection Mode
- VIN1 Priority Selection Mode
- Wide Input Range: 1.5 V to 4.8 V
- Low R_{ON}
 - Channel 1, VIN1 = 45 m Ω Typ at 4.8 V_{IN1}
 - Channel 2, VIN2 = 77 m Ω Typ at 4.8 V_{IN2}
- I_{OUT} Max
 - Channel 1 = 2.0 A
 - Channel 2 = 1.5 A
- Ultra-Low Supply Current at Operation
 - I_Q : 1.1 μ A Typ at 4.8 V_{IN}
- Ultra-Low Stand-by Current
 - I_{SD} : 400 nA Typ at 4.8 V_{IN}
- True Reverse Current Clamping
- Operating Temperature Range:
 - -40 °C to 85 °C

PACKAGE

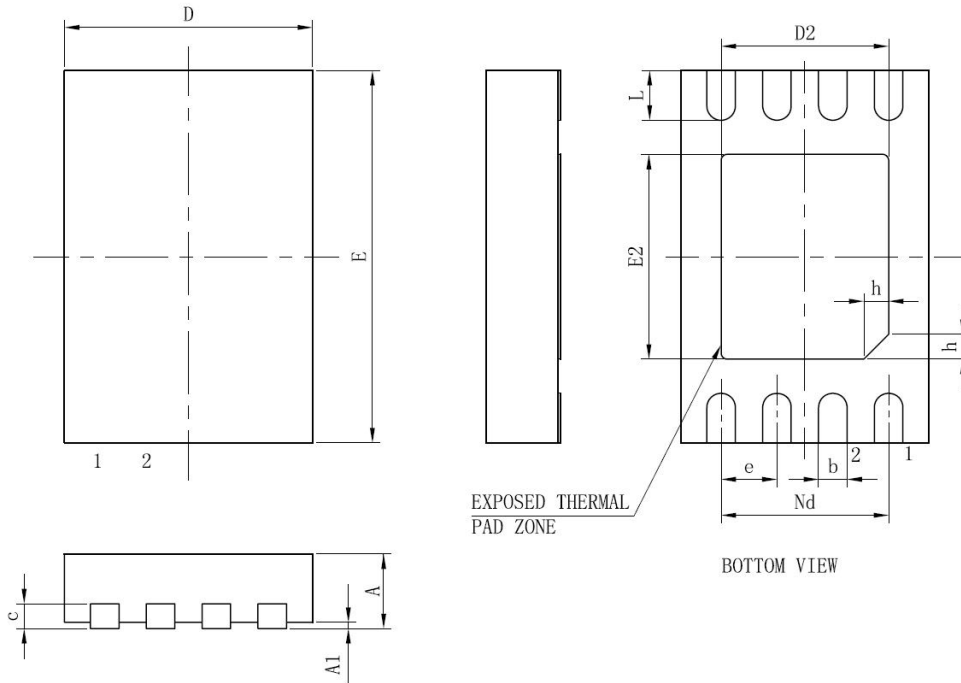


DFN 2x3-8L

PRODUCT INFORMATION

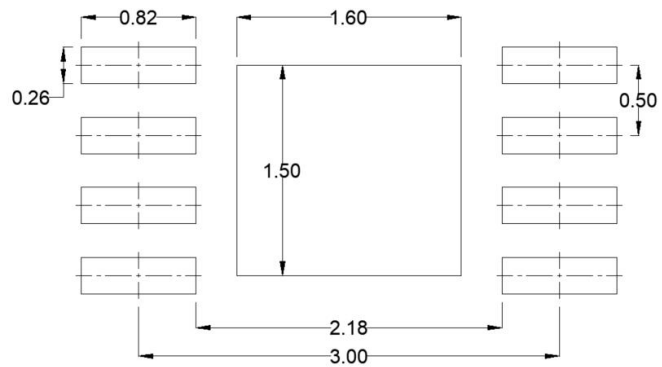
Part Number	Top Mark	Channel 1 (VIN1)		Channel 2 (VIN2)		Package
		R_{ON1} at 4.8 V _{IN}	I _{OUT}	R_{ON2} at 4.8 V _{IN}	I _{OUT}	
GLF4003-D3G7	HG	45 m Ω	2.0 A	77 m Ω	1.5 A	DFN 2x3-8L

PACKAGE OUTLINE



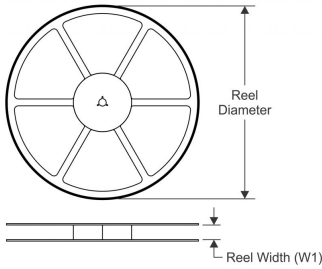
SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	0.70	0.75	0.80
A1	—	0.02	0.05
b	0.18	0.25	0.30
c	0.18	0.20	0.25
D	1.90	2.00	2.10
D2	1.40	1.50	1.60
e	0.50BSC		
Nd	1.50BSC		
E	2.90	3.00	3.10
E2	1.50	1.60	1.70
L	0.30	0.40	0.50
h	0.20	0.25	0.30

Recommended Footprint

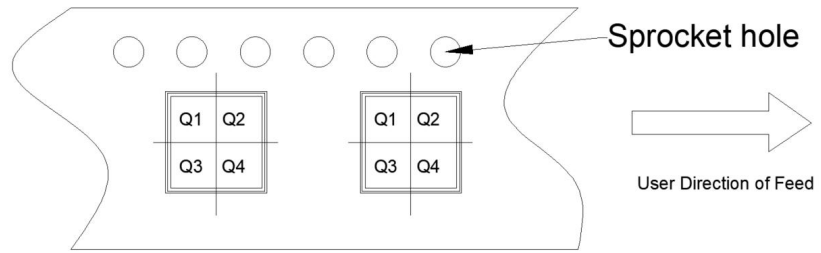


TAPE AND REEL INFORMATION

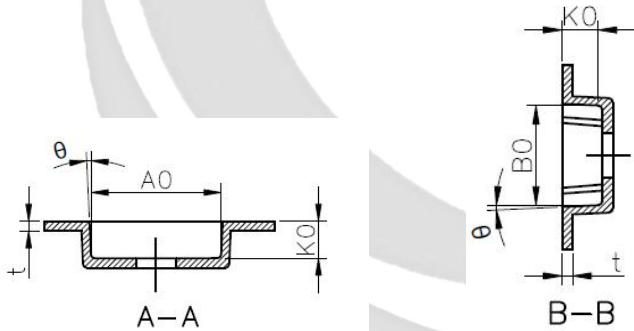
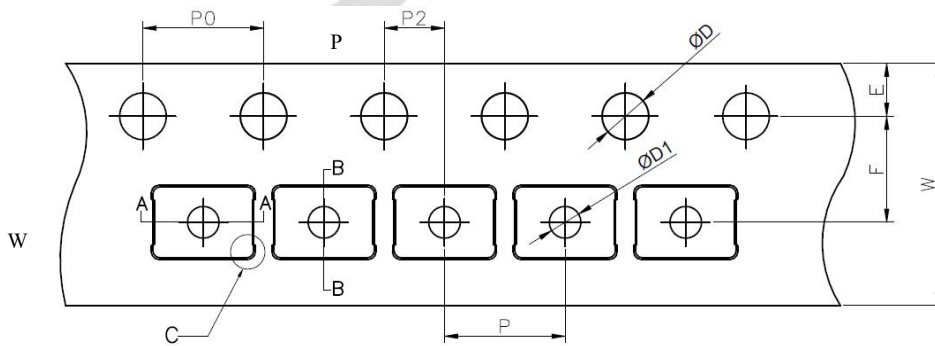
REEL DIMENSIONS



QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE



TAPE DIMENSIONS



Device	Package	Pins	SPQ	Reel Diameter (mm)	Reel Width W1	A0	B0	K0	P	W	Pin1
GLF4003-D2G7	DFN 2x3-8L	8	3000	180	9	3.25	2.25	0.95	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