

DESCRIPTION

The GLF4033A is an integrated power multiplexer IC featuring dual independent power switches connected to a single output, enabling seamless transitions between two input power sources. The device supports a manual selection mode, configurable via the logic input pins S1 and S2. These pins allow system designers to manually select VIN1 or VIN2 or disable both switches.

The GLF4033A features low conduction resistance, enabling robust 4 A continuous current handling capability per channel. The device incorporates advanced cross-conduction protection that actively prevents current flow between input sources, maintaining isolation regardless of which power supply is active. The GLF4033A is ideally suited for power systems requiring an internal backup power supply.

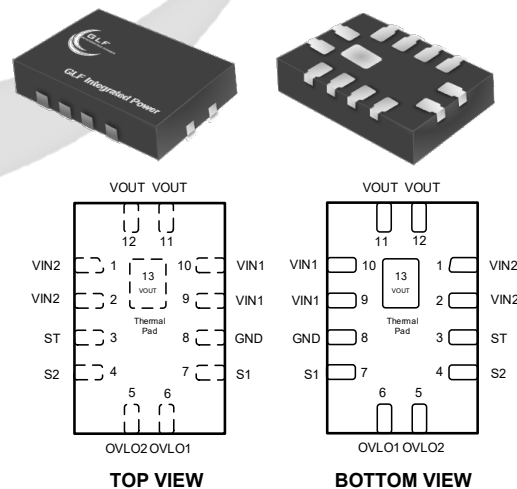
FEATURES

- Two-Input and Single-Output Power Multiplexer IC
- Manual Input Selection Mode
- Wide Input Range
 - VIN1 & VIN2 = 2.8 V to 10 V
- I_{OUT} Max: 4 A Per Channel, VIN1 and VIN2
- Low R_{ON}: 24 mΩ Typ.
- Low Quiescent Current, I_Q
 - 45 μA Typ. at V_{IN1} & V_{IN2} = 3 V
 - 59 μA Typ. at V_{IN1} & V_{IN2} = 5 V
 - 65 μA Typ. at V_{IN1} & V_{IN2}=9 V
- Low Shutdown Current, I_{SD}
 - 11 μA Typ. at V_{IN1} & V_{IN2} = 3 V
 - 13 μA Typ. at V_{IN1} & V_{IN2} = 5 V
 - 15 μA Typ. at V_{IN1} & V_{IN2}=9 V
- No Cross Conduction Between Two Input Sources
- Programmable Over-Voltage Protection
- Thermal Shutdown Protection
- State Indication Function
- Operating Temperature Range
 - - 40 °C to 85 °C

APPLICATIONS

- Power System with Backup Power
- Communication / Network System
- Security and Tracking System

PACKAGE



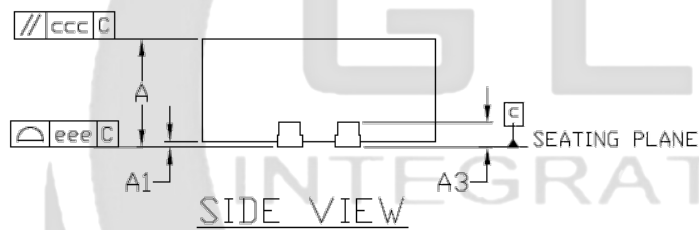
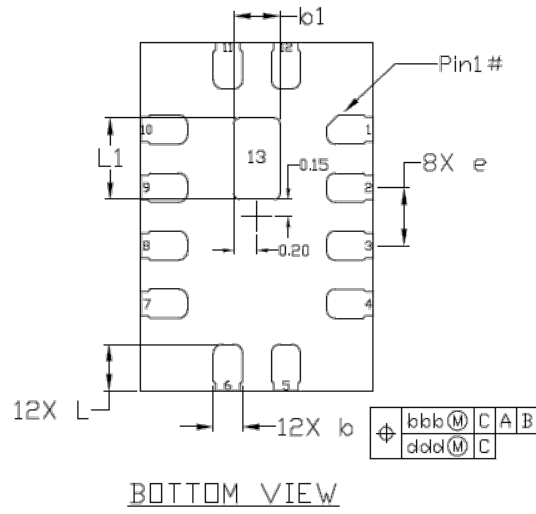
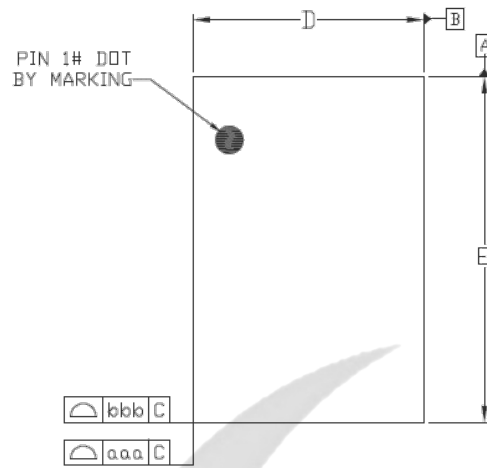
2 mm x 3 mm, QFN-13L

PRODUCT INFORMATION

Part Number	Top Mark	R _{ON}	I _{OUT}	Package
GLF4033A - Q47	DX	24 mΩ	4 A	2 mm x 3 mm, QFN-13L



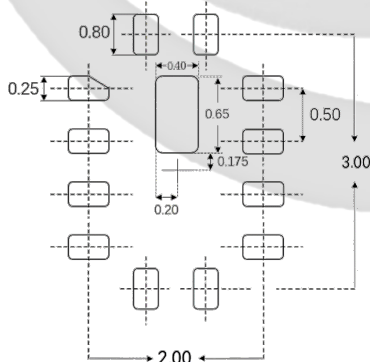
PACKAGE OUTLINE



Notes:

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-2018.
2. NX IS THE TOTAL NUMBER OF TERMINALS

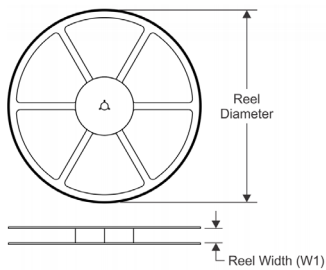
Recommended Footprint



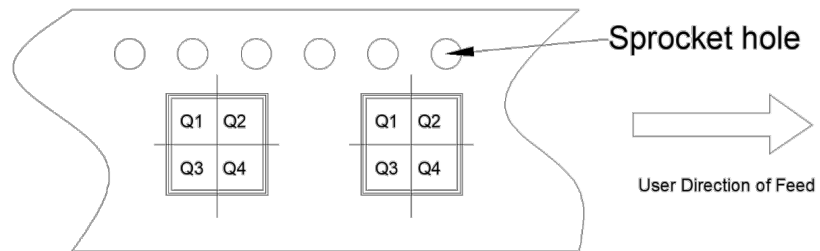
REF.	Dimensions Ref.		
	Min.	Nom.	Max.
A	0.500	0.550	0.600
A1	0.000	---	0.050
A3	0.152 Ref.		
D	1.950	2.000	2.050
E	2.950	3.000	3.050
b	0.200	0.250	0.300
b1	0.350	0.400	0.450
e	0.500 BSC		
L	0.350	0.400	0.450
L1	0.650	0.700	0.750
Tol. of Form & Position			
aaa	0.10		
bbb	0.10		
ccc	0.10		
ddd	0.05		
eee	0.08		

TAPE AND REEL INFORMATION

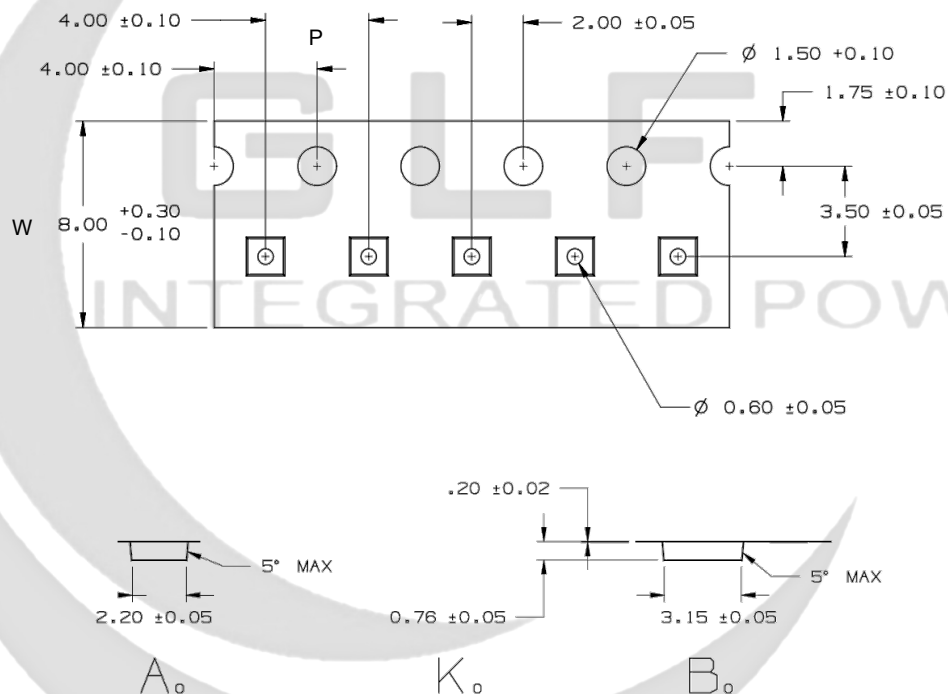
REEL DIMENSIONS



QUADRANT ASSIGNMENTS PIN 1 ORIENTATION TAPE



TAPE DIMENSIONS



Device	Package	Pins	SPQ	Reel Diameter (mm)	Reel Width W1	A0	B0	K0	P	W	Pin1
GLF4033A-Q47	2mmx3mm QFN -13L	13	3000	180	9	2.20	3.15	0.76	4	8	Q1

Remark:

A0: Dimension designed to accommodate the component width

B0: Dimension designed to accommodate the component length

K0: Dimension designed to accommodate the component thickness

W: Overall width of the carrier tape

P: Pitch between successive cavity centers