

Ultra-low current consumption SPDT Switch

- ✓ Excellent performance for RF switching - perfect for battery-powered and energy harvesting applications
- ✓ Operates at very low control voltages down to 1.6V

■ Why does above matter?

NJG1816K75 is the best choice for battery operated IoT devices because of its ultra-low current consumption. Applications such as smart meters, traffic tracking, environmental monitoring, and other services are increasingly realized by data collection from Internet of things (IoT) devices who send them to networks such as the increasingly popular LPWA (Low Power Wide Area) network. Small IoT systems require small components and NJG1816K75, housed in a 1.0 mm x 1.0 mm package, supports this requirement perfectly.

Main features of LPWA communications are:

- Low power operation: Battery lifetime of up to 10 years using a coin cell battery
- Long range: One base station covers tens of kilometers
- Low data rates: ranging from several dozen bps up to 1M bps

NJG1816K75 is a 2 bit control SPDT switch IC suitable for LPWA communications in Sigfox, LoRaWAN and Wi-SUN networks. NJG1816K75 supports 1.6 V low control voltage signal featuring low current consumption which is important for modern LPWA communication networks.

■ Features

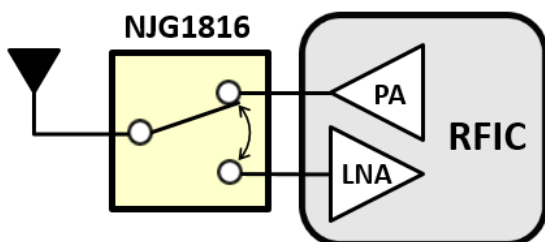
- ▶ Operating frequency: 50 MHz to 3 GHz
- ▶ Low control voltage: 1.6 V min.
- ▶ Low current consumption: 0.1 μ A typ.
- ▶ Low insertion loss: 0.45 dB typ. @f = 920 MHz
- ▶ High isolation: 30 dB typ. @f = 920 MHz
- ▶ Package size: 1.0 x 1.0 mm, 6-pin
- ▶ RoHS compliant and Halogen Free, MSL1

■ [datasheet Link](#)

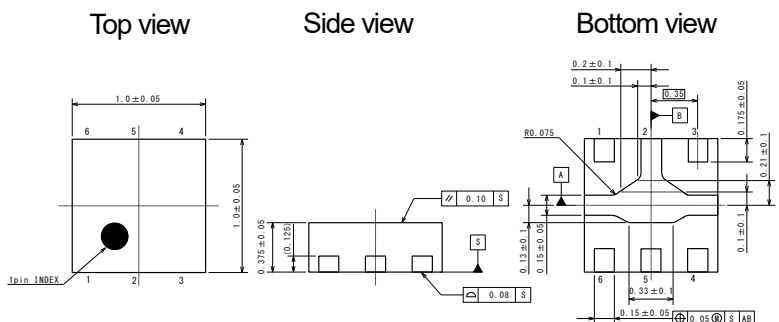


■ Application Example

- ▶ LPWA (Sigfox, LoRaWAN, Wi-SUN etc.) applications
- ▶ TX/RX switching applications
- ▶ General purpose RF switching applications



■ Package information (DFN6-75)



* All information, specifications and product descriptions in this document are subject to change at any time, without prior notice.
 * Contact your local NJR office or your distributor to obtain the latest specifications before placing your product order.

