

## 0.5 - 6.0 GHz, 10W High Power SPDT Switch

- ✓ Ultra low insertion Loss and high power up to 6 GHz.
- ✓ High speed switching and a wide frequency range perfectly matching 5G communication requirements
- ✓ High power switching up to 40dBm in a 2mm x 2mm package

### ■ Why does above matter?

With the implementation of 5G networks, the base stations and small cells market is rapidly growing, which leads to a huge demand for high power/high speed switches.

For high power switches, low loss performance is an important feature and a major challenge. 5G systems in particular, require a SPDT switch with low loss up to high bands such as 3.85 and 4.7GHz. Additionally, 5G as a high-speed communication system, needs very low switching times to switch the TX and RX signals.

NJG1817ME4 is a SPDT switch capable of handling high power up to 40dBm. It offers wideband switching at low-loss up to 6GHz paired with 150ns switching time, fulfilling the key requirements of modern 5G high-speed communication systems.

NJG1817ME4 comes in a 12pin, 2mmx2mm EQFN small size package for compact and small size systems.

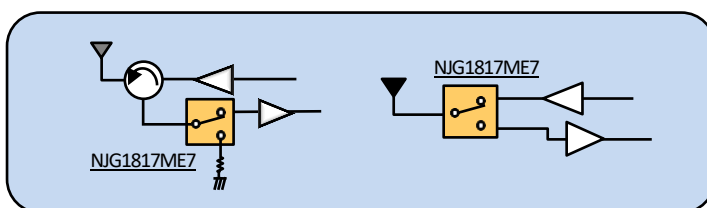
### ■ Features

- ▶ Control voltage: 2.7 to 5.0V
- ▶ Low insertion loss: 0.3/0.35/0.4/0.45 dB typ.  
@f = 0.7/3.85/4.7/6.0 GHz
- ▶ High isolation: 30/27/27/25 dB typ.  
@f= 0.7/3.85/4.7/6.0 GHz
- ▶ P<sub>-0.1dB</sub>: +40 dBm typ.  
@f=0.7/3.85/4.7/6.0GHz
- ▶ High speed switching time: 150 ns typ.
- ▶ Small package: EQFN12-E4 2.0 x 2.0 mm<sup>2</sup>, 12-pin
- ▶ RoHS compliant and Halogen Free, MSL1

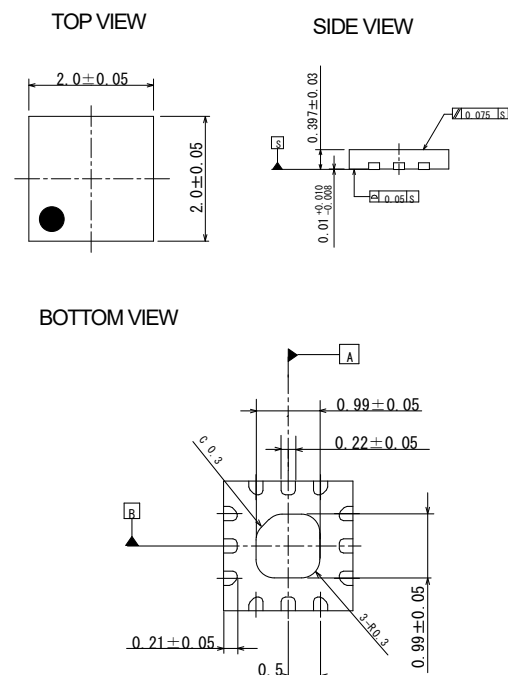
### ■ Application

- ▶ 5G (Sub-6GHz) small cell system
- ▶ Commercial radio system
- ▶ TX/RX switching applications
- ▶ General purpose switching applications

### ■ Application Block Example



### ■ Package information (EQFN12-E4)



### ■ [Datasheet Link](#)



\* 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.

