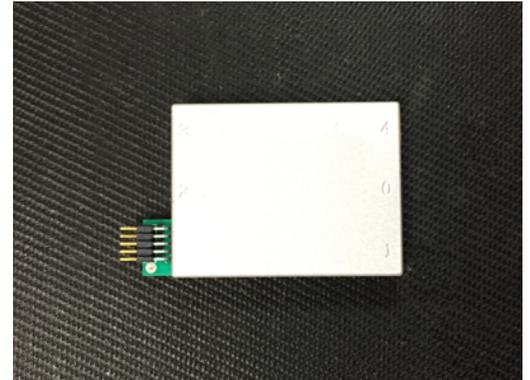


FEATURES

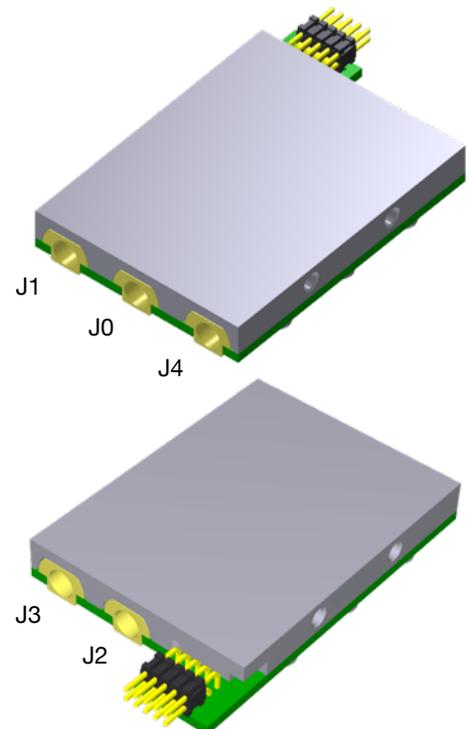
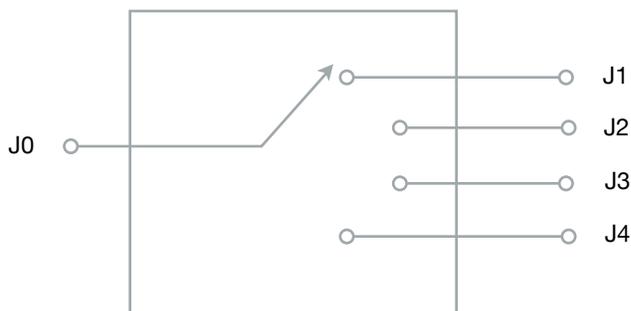
- **Low Insertion Loss (< 2.6 dB typical)**
- **Long Switch Lifecycle (> 10⁹ Switches)**
- **High Linearity for IP3 Measurements**
- **RF Shielded Package for Use in Fixtures**

DESCRIPTION

The RIK0253A is a Single-Pole Four-Throw (SP4T) Reflective RF Switch utilizing active pin diode technology to deliver high linearity and low insertion loss. This fixture module is ideally suited for high accuracy IP3 applications, test resource switching, and/or multi-site signaling. The RIK0253A allows for drop-in implementation with seamless software integration and control with Cassini fixtures equipped with RIFL carriers. Supporting up to 1 watt of input signal power and sub-microsecond switching speeds, the RIK0253A offers a versatile RF switching solution for a wide array of applications.



SIMPLIFIED BLOCK DIAGRAM



PERFORMANCE SPECIFICATIONS¹

Frequency Range 100 MHz to 20 GHz

Insertion Loss

0.1 - 6 GHz	2.0 dB
6 - 13 GHz	2.3 dB
13 - 20 GHz	2.6 dB

Isolation

0.1 - 6 GHz	50 dB
6 - 13 GHz	37 dB
13 - 20 GHz	28 dB

Return Loss

0.1 - 6 GHz	15 dB
6 - 13 GHz	10 dB
13 - 20 GHz	10 dB

IP3 @ 2 GHz +60 dBm

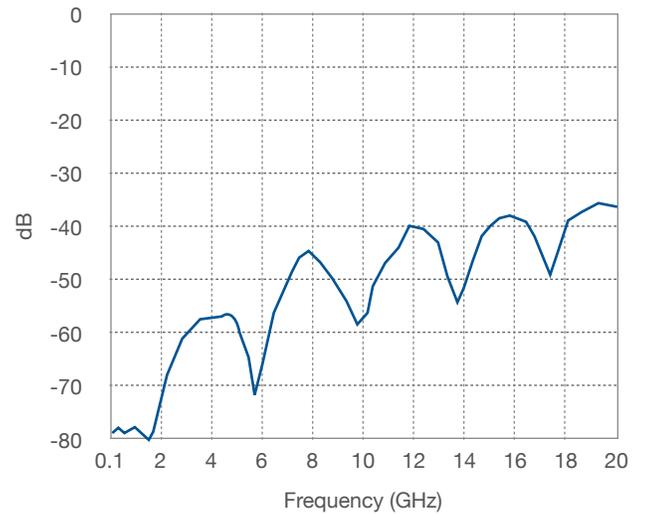
Switching Speed 50 nS

Lifecycle 10⁹ Switches

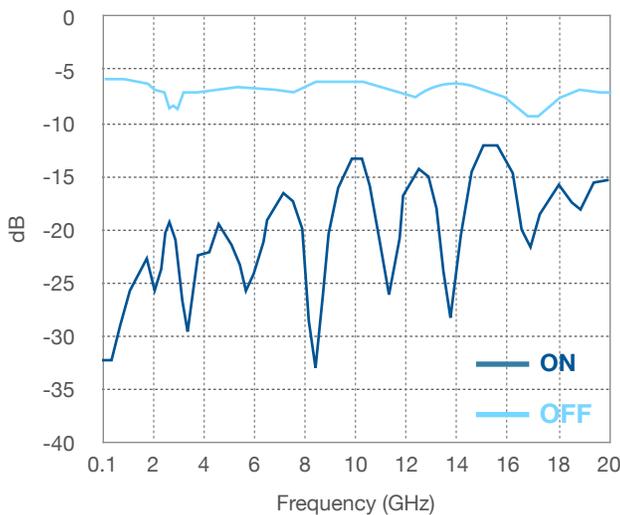
Maximum Input Signal 30 dBm

1. All provided specifications denote typical performance

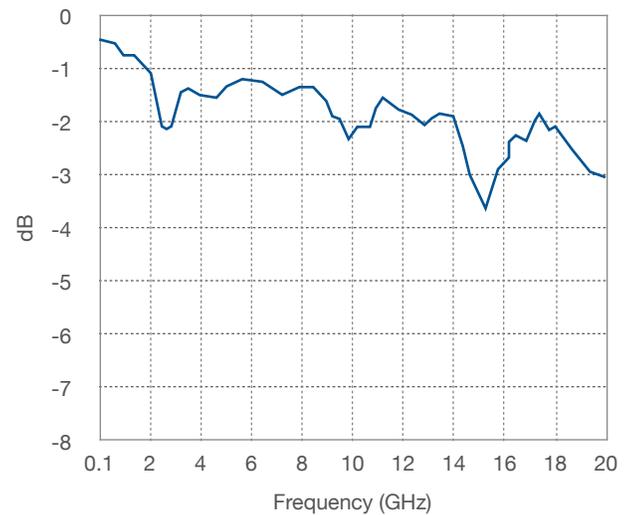
ISOLATION



IMPEDANCE MATCH



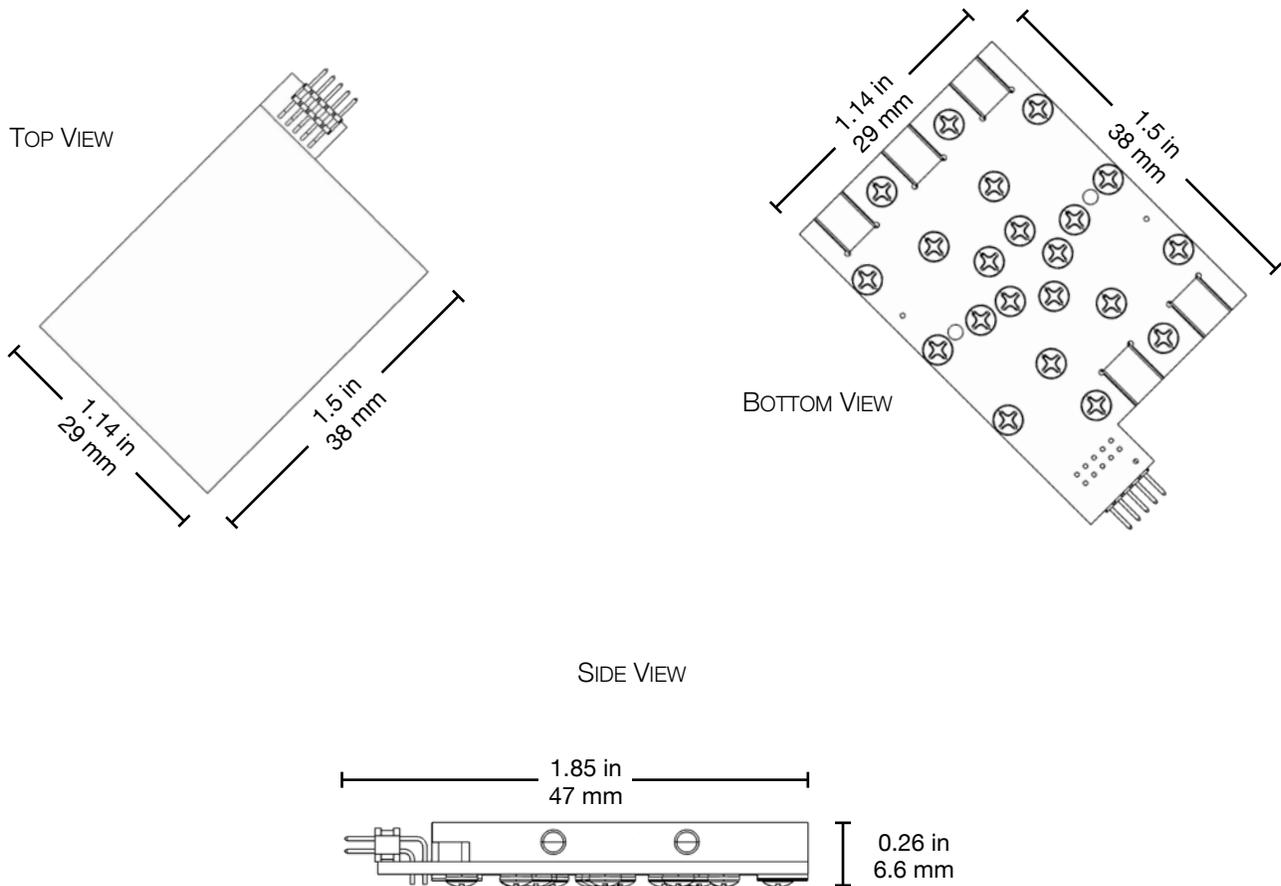
INSERTION LOSS



CONNECTOR TYPES

RF Ports	SMP Male; Limited Detent
DC/Control	10-pin 2x5

PHYSICAL DIMENSIONS



ALL PRODUCT, PRODUCT SPECIFICATIONS, AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE PERFORMANCE, FUNCTION, DESIGN, OR OTHERWISE. The information in this publication is to the best of our knowledge, accurate at the date of publication.