

F2910NBGP

Data Sheet

RF SWITCH, 8GHZ, -55 TO 105DEG C New

Manufacturers Renesas Technology Corp

Package/Case 8-VFDFN

Product Type RF Integrated Circuits

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for F2910NBGP or Email to us; sales@ovaga.com We will contact you in 12 hours.



General Description

The F2910 is a rugged, low insertion loss, $50~\Omega$ SPST absorptive RF switch designed for a multitude of wireless and other RF applications. This device covers a broad frequency range from 30~MHz to 8000~MHz. In addition to providing low insertion loss, the F2910 also delivers excellent linearity and isolation performance while providing a $50~\Omega$ termination to the RF2 port when isolated. This product also incorporates IDT's new Constant Impedance, Kz, feature. The Kz feature maintains a near constant impedance when switching between RF ports preserving a higher RF port return loss. Standard switches without Kz create a large Voltage Standing Wave Ration (VSWR) transient when switching RF paths because the impedance of the switch in not well controlled during the switching event due to poor RF port return loss. These VSWR transients can potentially reduce the ruggedness of the switch itself and can also subject downstream components to large voltage stresses reducing ruggedness and degrading overall system performance. IDT's Kz feature controls the impedance during the switching process minimizing the VSWR transient thereby improving switch ruggedness, reducing voltage stresses on downstream components and improving overall system performance.

Features

Single pole, single throw with and absorptive termination on RF2 when isolated

Constant Impedance, Kz, feature

High performance RF Isolation of 51 dB @ 2000 MHz

Insertion Loss of 0.55 dB @ 2000 MHz

High continuous RF CW Power Handling @ 85° C Selected RF path: 30 dBm

Terminated RF path: 27 dBm

High linearity: IIP2 of 118 dBm

IIP3 of 65 dBm

Single 2.7 V to 5.50 V supply voltage

3.3 V and 1.8 V compatible control logic

Operating temperature -55 $^{\circ}$ C to +105 $^{\circ}$ C

2 mm × 2 mm 8-pin VFQFP-N package



Related Products



F2977NEGK

Renesas Technology Corp 12-UFQFN



F2950NEGK

Renesas Technology Corp



F2923NCGI

Renesas Technology Corp TQFN-20



F2480NBGI8

Renesas Technology Corp VFQFPN-32



F2977NEGK8

Renesas Technology Corp



F2912NCGI

Renesas Technology Corp 20-WFQFN



F2480NBGI

Renesas Technology Corp TQFN-32



F2976NEGK8

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