



ICASS1050-5T

PRODUCT SUMMARY



1 – 5 GHz SP5T SWITCH

ICASS1050-5T is a low loss, high isolation 50 Ω SP5T absorptive switch fabricated in silicon technology. The switch is designed for 4G and 5G base station infrastructure systems supporting all major 3GPP bands from 1 to 5 GHz. The five RF ports have a control interface compatible with 1.8 V or 3.3 V CMOS logic. The switch controller of ICASS1050-5T is specially designed to reduce the phase and amplitude variation during hot switching on the signal paths.

Key Features

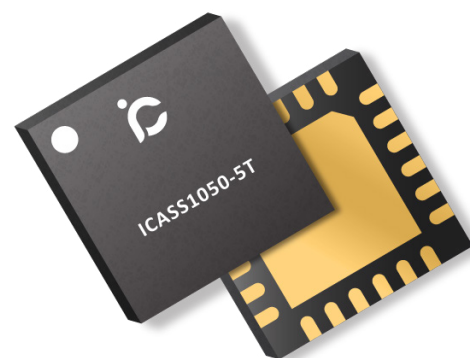
- Frequency range: 1 – 5 GHz
- Power handling (CW signal):
 - 33 dBm on selective port
 - 27 dBm on terminated port
- Low insertion loss: < 0.7 dB
- Excellent return loss: > 20 dB
- High isolation: > 40 dB (RFx-RFy and RFx-RFz)
- Fast switching time: < 600 ns
- Low drain current: $I_{DD} < 100 \mu\text{A}$
- VDD supply voltage range: 3.0 V to 6.0 V
- 1.8 V or 3.3 V compatible control logic
- Package size: 4 x 4 x 0.75 mm³

Typical Applications

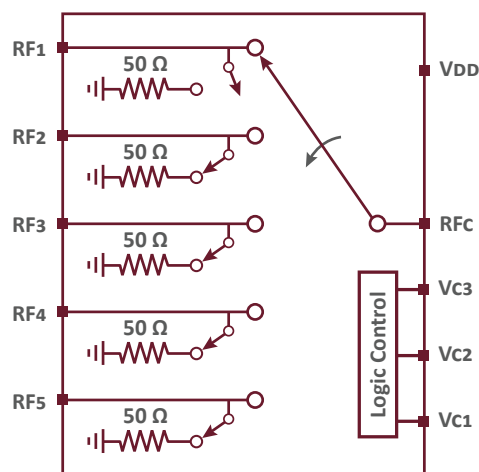
- Support major sub-6 GHz 3GPP bands
- 4G LTE and 5G NR FR1 infrastructure
- High performance communication systems
- Test equipment
- Digital pre-distortion feedback path

Ordering Guide

| Part Name | Description |
|------------------|-----------------------------------|
| ICASS1050-5T | 1 – 5 GHz SP5T Switch |
| ICASS1050-5T-EVB | Evaluation Board for ICASS1050-5T |



24 Pad 4 x 4 mm² SMT Package



Functional Block Diagram

5G NR FR1 Switch Family

| Product Name | Description |
|--------------|-----------------|
| ICASS1050-5T | 1 – 5 GHz, SP5T |
| ICASS1050-4T | 1 – 5 GHz, SP4T |

REV 1.0

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