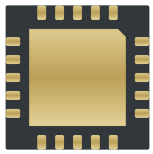
100–20000 MHz RF Switch IC — SP4T; TTL

LCI-SW-100-20000-SP4T-C · 100–20000 MHz · RF Switch IC.

The RF table specifies: SP4T; Insertion loss -2.6 dB (typical); Isolation -50 dB (typical). RF test conditions: TA = +25 °C.



QFN20 4 × 4 mm

The RF ports require external DC-blocking capacitors.

VE = -5 V; VA = 0 V; VB = 0 V: RFin ↔ RFout1

VE = -5 V; VA = 3.3 V; VB = 0 V: RFin ↔ RFout2

VE = -5 V; VA = 0 V; VB = 3.3 V: RFin ↔ RFout3

VE = -5 V; VA = 3.3 V; VB = 3.3 V: RFin ↔ RFout4

T_peak ≤ 260 °C

RFin: 3

RFout1: 20

RFout2: 17

RFout3: 9

RFout4: 6

VE: 11, 15

VA: 14

VB: 12

NC: 13

GND: 1, 2, 4, 5, 7, 8, 10, 16, 18, 19

Package outline dimensions: 4 × 4 × 0.75 mm.

RF characteristics TA = +25 °C

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Operating frequency	f	100	-	20000	MHz
Insertion loss	IL	-	-2.6	-	dB
Isolation	ISO	-	-50	-	dB
Input VSWR	-	-	1.3	-	-
Output VSWR (on)	-	-	1.3	-	-
Output VSWR (off)	-	-	1.3	-	-

DC bias and current

TA = +25 °C

Parameter	Symbol	Minimum	Typical	Maximum	Value	Unit
Negative supply voltage	-	-	-	-	-5	V
Negative-supply quiescent current	-	-	0.0018	-	-	A
Input drive current	-	-	0.0003	-	VIH = 5 V; TTL	A
High-level input voltage	-	3	-	5	-	V
Low-level input voltage	-	0	-	0.4	-	V

Absolute limits

Absolute limits; these are not normal operating targets.

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Maximum input power	-	-	-	27	dBm
Storage temperature	-	-65	-	150	°C
Operating temperature	-	-55	-	85	°C
Minimum negative supply voltage	-	-6	-	-	V
Maximum control voltage	-	-	-	6	V

Package outline dimensions

Parameter	Value	Unit
Package outline dimensions	4 × 4 × 0.75	mm

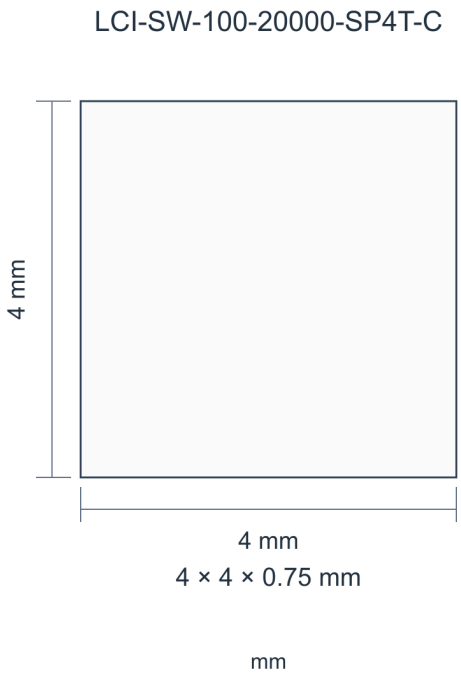
Current publication record · 1.3 · 2026-11-12. Product description or editorial content updated. Replaces revision 1.2.

Integration notes

QFN20 4 × 4 mm The RF ports require external DC-blocking capacitors. VE = -5 V; VA = 0 V; VB = 0 V: RFin ↔ RFout1 VE = -5 V; VA = 3.3 V; VB = 0 V: RFin ↔ RFout2 VE = -5 V; VA = 0 V; VB = 3.3 V: RFin ↔ RFout3 VE = -5 V; VA = 3.3 V; VB = 3.3 V: RFin ↔ RFout4 T_peak ≤ 260 °C RFin: 3 RFout1: 20 RFout2: 17 RFout3: 9 RFout4: 6 VE: 11, 15 VA: 14 VB: 12 NC: 13 GND: 1, 2, 4, 5, 7, 8, 10, 16, 18, 19

Mechanical Outline

Reference drawing showing selected dimensions in mm. Use the complete installation drawing for mounting.



Document notice

Specifications are subject to revision. Before design release, confirm the current document revision and product-specific requirements with LCRF. The approved quotation and order documentation define the supplied configuration.