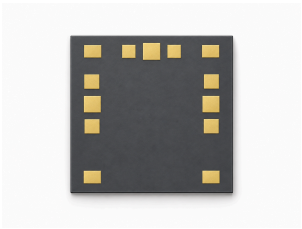
2000–18000 MHz SPDT MMIC Switch Die — IL 0.9 dB (typical)



LCI-SW-2000-18000-SPDT · 2000–18000 MHz · SPDT MMIC Switch Die.

The RF table specifies: Insertion loss 0.9 dB (typical); Isolation 23 dB (typical); P0.2dB 37 dBm (typical). RF test conditions: Von = +28 V; Voff = 0 V; TA = +25 °C.

RFC integrates a DC-blocking capacitor; RF1 and RF2 have no integrated DC-blocking capacitors.

Die dimensions: 1.17 × 1.15 × 0.08 mm.

V1 (V) = 28; V2 (V) = 0; RF = RFC ↔ RF1

V1 (V) = 0; V2 (V) = 28; RF = RFC ↔ RF2

RF characteristics

Von = +28 V; Voff = 0 V; TA = +25 °C

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Operating frequency	f	2000	-	18000	MHz
Insertion loss	-	-	0.9	-	dB
Isolation	-	-	23	-	dB
Input power at 0.2 dB compression	-	-	37	-	dBm
Switching time	-	-	20	-	ns

Control voltages

Parameter	Symbol	Minimum	Typical	Maximum	Value	Unit
Control voltage in the on state	-	-	-	-	28	V
Control voltage in the off state	-	-	-	-	0	V

Absolute limits

Absolute limits; these are not normal operating targets.

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Maximum input power [1]	-	-	-	38	dBm
Storage temperature	-	-65	-	150	°C
Operating temperature	-	-55	-	85	°C

[1] CW

Die dimensions

Parameter	Value	Unit
Die dimensions	1.17 × 1.15 × 0.08	mm
Plan-view outline tolerance	±50	µm

Bond-pad assignments

Pins	Symbol	mm
1	RFC	0.120 × 0.120
2, 3	RF1, RF2	0.120 × 0.120
4, 5	V1, V2	0.120 × 0.090

Current publication record · 1.7 · 2026-11-12. Product description or editorial content updated. Replaces revision 1.6.

Integration notes

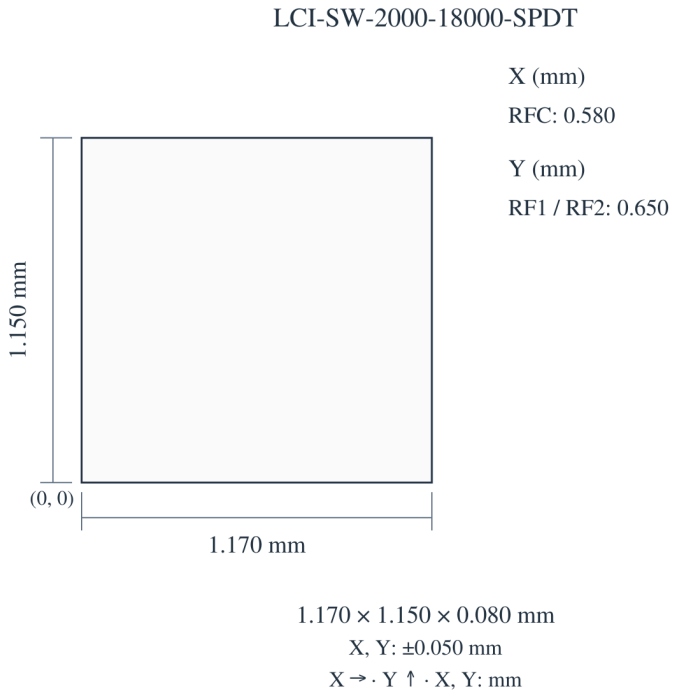
RFC integrates a DC-blocking capacitor; RF1 and RF2 have no integrated DC-blocking capacitors. V1 (V) = 28; V2 (V) = 0; RF = RFC ↔ RF1 V1 (V) = 0; V2 (V) = 28; RF = RFC ↔ RF2

Pad connection notes

The duplicate V1 pads are internally connected, as are the duplicate V2 pads; either control-pad set may be powered.

Mechanical Outline

Outline and dimensioned coordinates in mm. Use this drawing as a dimensional reference. Fabrication and wire bonding require complete drawings.

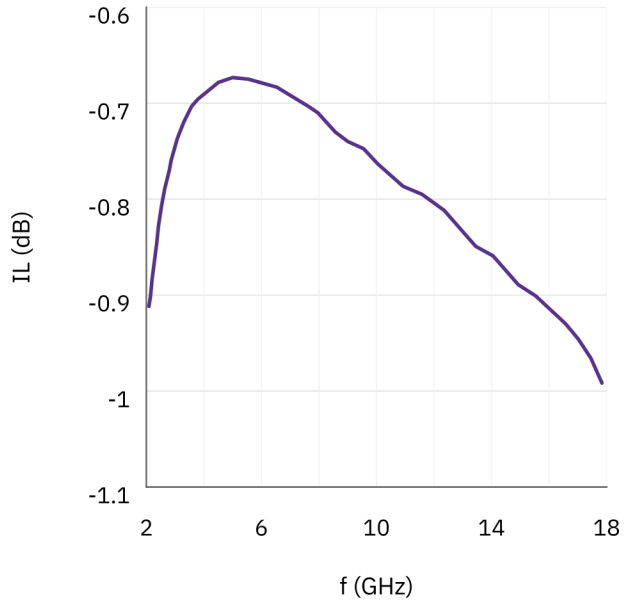


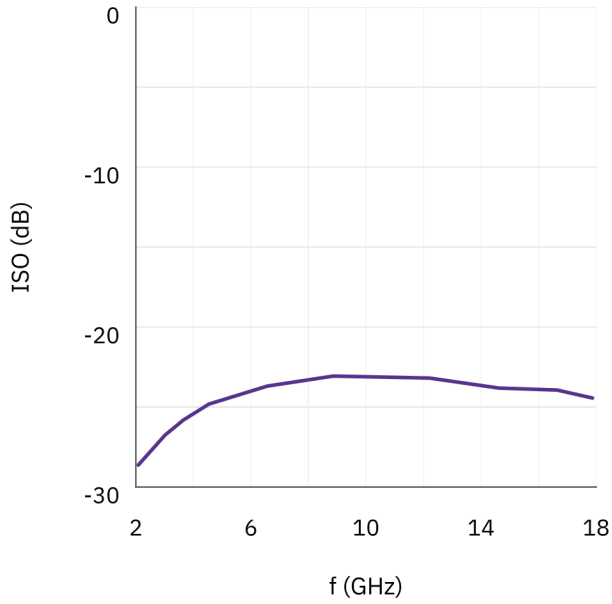
Performance curves

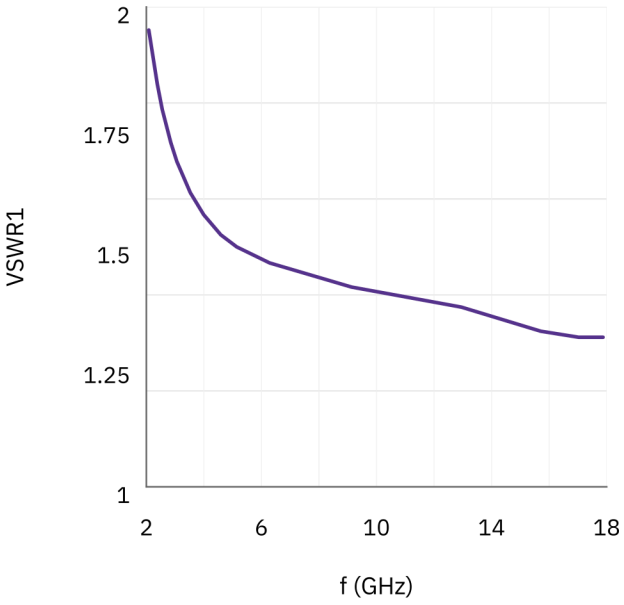
Each performance plot applies to its stated operating conditions.

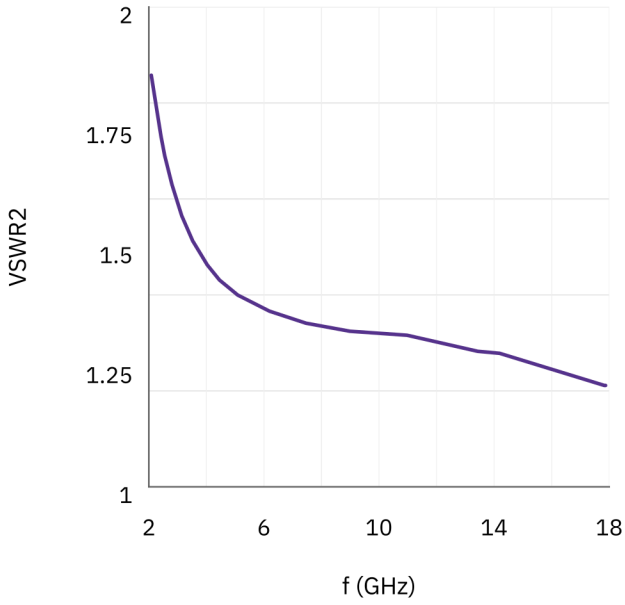
Insertion loss; Isolation; Input matching; Output matching.

Figure notes: TA=+25°C. Readings are approximate. Freq_Input = 2–18 GHz; V1 = +28 V; V2 = 0 V; Pin = −10 dBm.









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.