

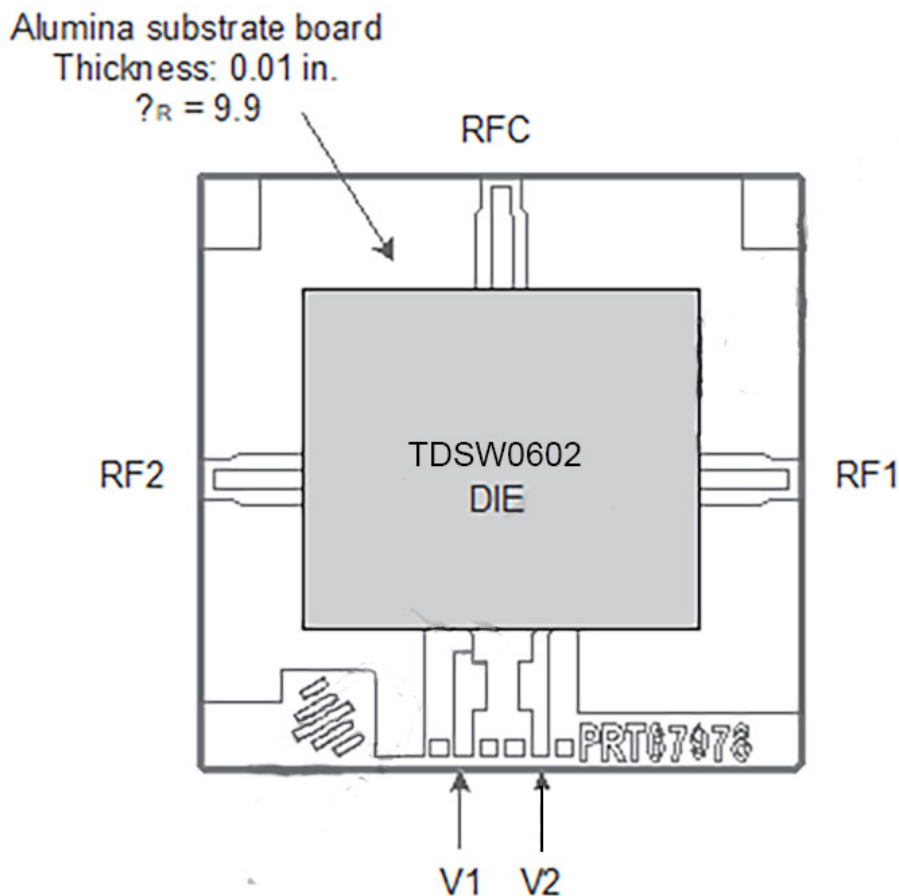
Evaluation Setup

The TDSW0602T s-parameter data and input 1dB compression point up to 60 GHz (Table 3 and Figure 3–Figure 12) were taken using either co-planar waveguide with ground (CPWG) or grounded co-planar waveguide (GCPW) on an alumina substrate and RF probes.

The TDSW0602T 2nd harmonic, input 1dB compression point below 18 GHz, input IP3 measurements, settling time and switching time (Table 3) were taken on a PCB using 2.92 mm connectors.

Bypass capacitors are not required.

Figure 13 • Alumina Substrate Board for TDSW0602T



Technical Data subject to restrictions contained on the cover page.

Pin Configuration

This section provides pin information for the TDSW0602T. Figure 14 shows the pin configuration of this device. Table 5 provides a description for each pin.

Figure 14 • Pin Configuration (Bumps Up) for TDSW0602T

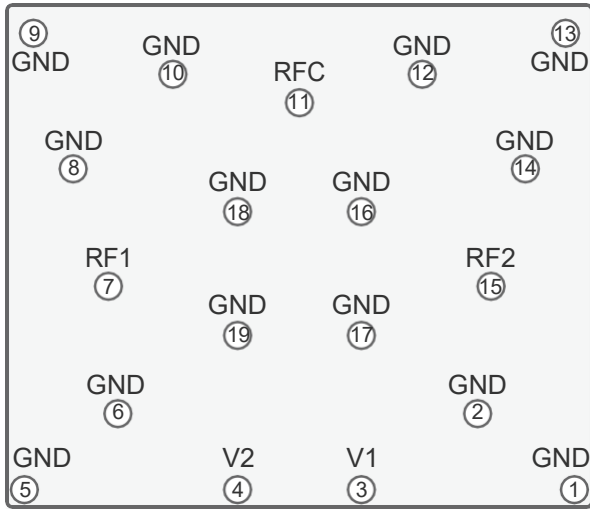


Table 5 • Pin Descriptions for TDSW0602T

Pin No.	Pin Name	Description
1, 2, 5, 6, 8–10, 12–14, 16–19	GND	Ground
3	V1	Control input 1
4	V2	Control input 2
7	RF1	RF port 1
11	RFC	RF common port
15	RF2	RF port 2

Die Mechanical Specifications

This section provides the die mechanical specifications for the TDSW0602T.

Table 6 • Mechanical Specifications for TDSW0602T

Parameter	Min	Typ	Max	Unit	Test Condition
Die size, singulated (x, y)	2485 × 2139	2495 × 2149	2505 × 2159	µm	Including excess silicon, maximum tolerance = ±10 µm
Wafer thickness	180	200	220	µm	
Bump pitch	500			µm	
Bump height	59.5	70	80.5	µm	
Bump diameter		91		µm	
UBM diameter	71	75	79	µm	

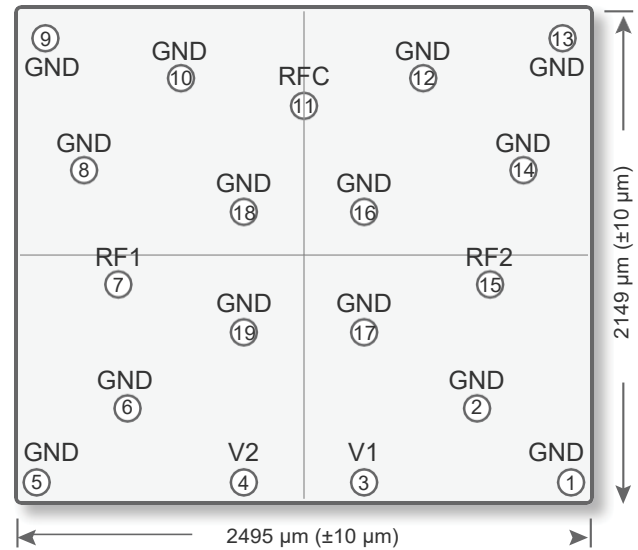
Technical Data subject to restrictions contained on the cover page.

Table 7 • Pin Coordinates for TDSW0602T^(*)

Pin #	Pin Name	Pin Center (µm)	
		X	Y
1	GND	1128.5	-958.5
2	GND	731.5	-646.5
3	V1	253.5	-958.5
4	V2	-253.5	-958.5
5	GND	-1128.5	-958.5
6	GND	-731.5	-646.5
7	RF1	-785.5	-121.5
8	GND	-931.5	363.5
9	GND	-1091.5	913.5
10	GND	-503.5	753.5
11	RFC	0	629
12	GND	503.5	753.5
13	GND	1091.5	913.5
14	GND	931.5	363.5
15	RF2	785.5	-121.5
16	GND	253.5	183.5
17	GND	253.5	-326.5
18	GND	-253.5	183.5
19	GND	-253.5	-326.5

Note: * All pin locations originate from the die center and refer to the center of the pin.

Figure 15 • Pin Layout for TDSW0602T⁽¹⁾⁽²⁾



Notes:

- 1) Drawings are not drawn to scale.
- 2) Singulated die size shown, bump side up.

Ordering Information

Table 8 lists the available ordering code for the TDSW0602T as well as shipping method.

Table 8 • Order Code for TDSW0602T

Order Code	Description	Packaging	Shipping Method
TDSW0602T-99	TDSW0602 SPDT RF switch	Flip Chip Die / Waffle Pack	Waffle Pack
TDSW0602T-00	TDSW0602T SPDT RF switch EVK	Evaluation Kit	Unit

Document Categories

Advance Information

The product is in a formative or design stage. The datasheet contains design target specifications for product development. Specifications and features may change in any manner without notice.

Preliminary Specification

The datasheet contains preliminary data. Additional data may be added at a later date. Teledyne e2v reserves the right to change specifications at any time without notice in order to supply the best possible product.

Product Specification

The datasheet contains final data. In the event Teledyne e2v decides to change the specifications, Teledyne e2v will notify customers of the changes by issuing a PCN (Product Change Notice).

Sales Contact

Contact Information:

Teledyne e2v ~ <http://www.teledyne-e2v.com> ~ inquiries@e2v-us.com

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Product Brief

This document contains a shortened version of the datasheet. For the full datasheet, contact sales@psemi.com.

Not Recommended for New Designs (NRND)

This product is in production but is not recommended for new designs.

End of Life (EOL)

This product is currently going through the EOL process. It has a specific last-time buy date.

Obsolete

This product is discontinued. Orders are no longer accepted for this product.