

74HC1G125-Q100; 74HCT1G125-Q100

Bus buffer/line driver; 3-state

Rev. 1 — 18 June 2013

Product data sheet

1. General description

The 74HC1G125-Q100; 74HCT1G125-Q100 is a single buffer/line driver with 3-state output. Inputs include clamp diodes. This enables the use of current limiting resistors to interface inputs to voltages in excess of V_{CC} .

This product has been qualified to the Automotive Electronics Council (AEC) standard Q100 (Grade 1) and is suitable for use in automotive applications.

2. Features and benefits

- Automotive product qualification in accordance with AEC-Q100 (Grade 1)
 - ◆ Specified from $-40\text{ }^{\circ}\text{C}$ to $+85\text{ }^{\circ}\text{C}$ and from $-40\text{ }^{\circ}\text{C}$ to $+125\text{ }^{\circ}\text{C}$
- Input levels:
 - ◆ For 74HC1G125-Q100: CMOS level
 - ◆ For 74HCT1G125-Q100: TTL level
- Symmetrical output impedance
- High noise immunity
- Low power consumption
- Balanced propagation delays
- ESD protection:
 - ◆ MIL-STD-883, method 3015 exceeds 2000 V
 - ◆ HBM JESD22-A114F exceeds 2000 V
 - ◆ MM JESD22-A115-A exceeds 200 V ($C = 200\text{ pF}$, $R = 0\text{ }\Omega$)

3. Ordering information

Table 1. Ordering information

Type number	Package			
	Temperature range	Name	Description	Version
74HC1G125GW-Q100 74HCT1G125GW-Q100	$-40\text{ }^{\circ}\text{C}$ to $+125\text{ }^{\circ}\text{C}$	TSSOP5	plastic thin shrink small outline package; 5 leads; body width 1.25 mm	SOT353-1
74HC1G125GV-Q100 74HCT1G125GV-Q100	$-40\text{ }^{\circ}\text{C}$ to $+125\text{ }^{\circ}\text{C}$	SC-74A	plastic surface mounted package; 5 leads	SOT753

4. Marking

Table 2. Marking

Type number	Marking code ^[1]
74HC1G125GW-Q100	HM
74HCT1G125GW-Q100	TM
74HC1G125GV-Q100	H25
74HCT1G125GV-Q100	T25

[1] The pin 1 indicator is located on the lower left corner of the device, below the marking code.

5. Functional diagram

Fig 1. Logic symbol

Fig 2. IEC logic symbol

Fig 3. Logic diagram

6. Pinning information

6.1 Pinning

74HC1G125-Q100

74HCT1G125-Q100

Fig 4. Pin configuration

6.2 Pin description

Table 3. Pin description

Symbol	Pin	Description
\overline{OE}	1	output enable input (active LOW)
A	2	data input
GND	3	ground (0 V)
Y	4	data output
V_{CC}	5	supply voltage

7. Functional description

7.1 Function table

Table 4. Function table^[1]

Control	Input	Output
\overline{OE}	A	Y
L	L	L
L	H	H
H	X	Z

[1] H = HIGH voltage level; L = LOW voltage level; X = don't care; Z = high-impedance OFF-state.

8. Limiting values

Table 5. Limiting values

In accordance with the Absolute Maximum Rating System (IEC 60134). Voltages are referenced to GND (ground = 0 V).

Symbol	Parameter	Conditions	Min	Max	Unit
V_{CC}	supply voltage		-0.5	+7.0	V
I_{IK}	input clamping current	$V_I < -0.5\text{ V}$ or $V_I > V_{CC} + 0.5\text{ V}$	^[1] -	±20	mA
I_{OK}	output clamping current	$V_O < -0.5\text{ V}$ or $V_O > V_{CC} + 0.5\text{ V}$	^[1] -	±20	mA
I_O	output current	$V_O = -0.5\text{ V}$ to $(V_{CC} + 0.5\text{ V})$	^[1] -	±35	mA
I_{CC}	supply current		-	70	mA
I_{GND}	ground current		-70	-	mA
T_{stg}	storage temperature		-65	+150	°C
P_{tot}	total power dissipation	$T_{amb} = -40\text{ °C}$ to $+125\text{ °C}$	^[2] -	200	mW

[1] The input and output voltage ratings may be exceeded if the input and output current ratings are observed.

[2] Above 55 °C the value of P_{tot} derates linearly with 2.5 mW/K.

9. Recommended operating conditions

Table 6. Recommended operating conditions

Voltages are referenced to GND (ground = 0 V).

Symbol	Parameter	Conditions	74HC1G125-Q100			74HCT1G125-Q100			Unit
			Min	Typ	Max	Min	Typ	Max	
V _{CC}	supply voltage		2.0	5.0	6.0	4.5	5.0	5.5	V
V _I	input voltage		0	-	V _{CC}	0	-	V _{CC}	V
V _O	output voltage		0	-	V _{CC}	0	-	V _{CC}	V
T _{amb}	ambient temperature		-40	+25	+125	-40	+25	+125	°C
$\Delta t/\Delta V$	input transition rise and fall rate	V _{CC} = 2.0 V	-	-	625	-	-	-	ns/V
		V _{CC} = 4.5 V	-	-	139	-	-	139	ns/V
		V _{CC} = 6.0 V	-	-	83	-	-	-	ns/V

10. Static characteristics

Table 7. Static characteristics 74HC1G125-Q100

At recommended operating conditions; voltages are referenced to GND (ground = 0 V).

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T _{amb} = -40 °C to +85 °C [1]						
V _{IH}	HIGH-level input voltage	V _{CC} = 2.0 V	1.5	1.2	-	V
		V _{CC} = 4.5 V	3.15	2.4	-	V
		V _{CC} = 6.0 V	4.2	3.2	-	V
V _{IL}	LOW-level input voltage	V _{CC} = 2.0 V	-	0.8	0.5	V
		V _{CC} = 4.5 V	-	2.1	1.35	V
		V _{CC} = 6.0 V	-	2.8	1.8	V
V _{OH}	HIGH-level output voltage	V _I = V _{IH} or V _{IL}				
		I _O = -20 µA; V _{CC} = 2.0 V	1.9	2.0	-	V
		I _O = -20 µA; V _{CC} = 4.5 V	4.4	4.5	-	V
		I _O = -20 µA; V _{CC} = 6.0 V	5.9	6.0	-	V
		I _O = -6.0 mA; V _{CC} = 4.5 V	3.84	4.32	-	V
V _{OL}	LOW-level output voltage	I _O = -7.8 mA; V _{CC} = 6.0 V	5.34	5.81	-	V
		V _I = V _{IH} or V _{IL}				
		I _O = 20 µA; V _{CC} = 2.0 V	-	0	0.1	V
		I _O = 20 µA; V _{CC} = 4.5 V	-	0	0.1	V
		I _O = 20 µA; V _{CC} = 6.0 V	-	0	0.1	V
I _I	input leakage current	I _O = 6.0 mA; V _{CC} = 4.5 V	-	0.15	0.33	V
		I _O = 7.8 mA; V _{CC} = 6.0 V	-	0.16	0.33	V
		V _I = V _{CC} or GND; V _{CC} = 6.0 V	-	-	1.0	µA
I _{OZ}	OFF-state output current	V _I = V _{IH} or V _{IL} ; V _O = V _{CC} or GND; V _{CC} = 6.0 V	-	-	5	µA
I _{CC}	supply current	V _I = V _{CC} or GND; I _O = 0 A; V _{CC} = 6.0 V	-	-	10	µA
C _I	input capacitance		-	1.5	-	pF

Table 7. Static characteristics 74HC1G125-Q100 ...continued

At recommended operating conditions; voltages are referenced to GND (ground = 0 V).

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T_{amb} = -40 °C to +125 °C						
V _{IH}	HIGH-level input voltage	V _{CC} = 2.0 V	1.5	-	-	V
		V _{CC} = 4.5 V	3.15	-	-	V
		V _{CC} = 6.0 V	4.2	-	-	V
V _{IL}	LOW-level input voltage	V _{CC} = 2.0 V	-	-	0.5	V
		V _{CC} = 4.5 V	-	-	1.35	V
		V _{CC} = 6.0 V	-	-	1.8	V
V _{OH}	HIGH-level output voltage	V _I = V _{IH} or V _{IL}				
		I _O = -20 µA; V _{CC} = 2.0 V	1.9	-	-	V
		I _O = -20 µA; V _{CC} = 4.5 V	4.4	-	-	V
		I _O = -20 µA; V _{CC} = 6.0 V	5.9	-	-	V
		I _O = -6.0 mA; V _{CC} = 4.5 V	3.7	-	-	V
		I _O = -7.8 mA; V _{CC} = 6.0 V	5.2	-	-	V
V _{OL}	LOW-level output voltage	V _I = V _{IH} or V _{IL}				
		I _O = 20 µA; V _{CC} = 2.0 V	-	-	0.1	V
		I _O = 20 µA; V _{CC} = 4.5 V	-	-	0.1	V
		I _O = 20 µA; V _{CC} = 6.0 V	-	-	0.1	V
		I _O = 6.0 mA; V _{CC} = 4.5 V	-	-	0.4	V
		I _O = 7.8 mA; V _{CC} = 6.0 V	-	-	0.4	V
I _I	input leakage current	V _I = V _{CC} or GND; V _{CC} = 6.0 V	-	-	1.0	µA
I _{OZ}	OFF-state output current	V _I = V _{IH} or V _{IL} ; V _O = V _{CC} or GND; V _{CC} = 6.0 V	-	-	10	µA
I _{CC}	supply current	V _I = V _{CC} or GND; I _O = 0 A; V _{CC} = 6.0 V	-	-	20	µA

[1] All typical values are measured at T_{amb} = 25 °C.

Table 8. Static characteristics 74HCT1G125-Q100

At recommended operating conditions; voltages are referenced to GND (ground = 0 V).

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T_{amb} = -40 °C to +85 °C[1]						
V _{IH}	HIGH-level input voltage	V _{CC} = 4.5 V to 5.5 V	2.0	1.6	-	V
V _{IL}	LOW-level input voltage	V _{CC} = 4.5 V to 5.5 V	-	1.2	0.8	V
V _{OH}	HIGH-level output voltage	V _I = V _{IH} or V _{IL} ; V _{CC} = 4.5 V				
		I _O = -20 µA	4.4	4.5	-	V
		I _O = -6.0 mA	3.84	4.32	-	V
V _{OL}	LOW-level output voltage	V _I = V _{IH} or V _{IL} ; V _{CC} = 4.5 V				
		I _O = 20 µA	-	0	0.1	V
		I _O = 6.0 mA	-	0.16	0.33	V
I _I	input leakage current	V _I = V _{CC} or GND; V _{CC} = 5.5 V	-	-	1.0	µA
I _{OZ}	OFF-state output current	V _I = V _{IH} or V _{IL} ; V _O = V _{CC} or GND; V _{CC} = 5.5 V	-	-	5	µA
I _{CC}	supply current	V _I = V _{CC} or GND; I _O = 0 A; V _{CC} = 5.5 V	-	-	10	µA
ΔI _{CC}	additional supply current	V _I = V _{CC} - 2.1 V; I _O = 0 A; V _{CC} = 4.5 V to 5.5 V	-	-	500	µA
C _I	input capacitance		-	1.5	-	pF
T_{amb} = -40 °C to +125 °C						
V _{IH}	HIGH-level input voltage	V _{CC} = 4.5 V to 5.5 V	2.0	-	-	V
V _{IL}	LOW-level input voltage	V _{CC} = 4.5 V to 5.5 V	-	-	0.8	V
V _{OH}	HIGH-level output voltage	V _I = V _{IH} or V _{IL} ; V _{CC} = 4.5 V				
		I _O = -20 µA	4.4	-	-	V
		I _O = -6.0 mA	3.7	-	-	V
V _{OL}	LOW-level output voltage	V _I = V _{IH} or V _{IL} ; V _{CC} = 4.5 V				
		I _O = 20 µA	-	-	0.1	V
		I _O = 6.0 mA	-	-	0.4	V
I _I	input leakage current	V _I = V _{CC} or GND; V _{CC} = 5.5 V	-	-	1.0	µA
I _{OZ}	OFF-state output current	V _I = V _{IH} or V _{IL} ; V _O = V _{CC} or GND; V _{CC} = 5.5 V	-	-	10	µA
I _{CC}	supply current	V _I = V _{CC} or GND; I _O = 0 A; V _{CC} = 5.5 V	-	-	20	µA
ΔI _{CC}	additional supply current	V _I = V _{CC} - 2.1 V; I _O = 0 A; V _{CC} = 4.5 V to 5.5 V	-	-	850	µA

[1] All typical values are measured at T_{amb} = 25 °C.

11. Dynamic characteristics

Table 9. Dynamic characteristics 74HC1G125-Q100

Voltages are referenced to GND (ground = 0 V); $C_L = 50$ pF unless otherwise specified; for test circuit see [Figure 7](#)

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
$T_{amb} = -40$ °C to $+85$ °C^[1]						
t_{pd}	propagation delay	A to Y; see Figure 5	[2]			
		$V_{CC} = 2.0$ V	-	24	125	ns
		$V_{CC} = 4.5$ V	-	10	25	ns
		$V_{CC} = 5$ V; $C_L = 15$ pF	-	9	-	ns
t_{en}	enable time	\overline{OE} to Y; see Figure 6	[2]			
		$V_{CC} = 2.0$ V	-	19	155	ns
		$V_{CC} = 4.5$ V	-	9	31	ns
		$V_{CC} = 6.0$ V	-	7	26	ns
t_{dis}	disable time	\overline{OE} to Y; see Figure 6	[2]			
		$V_{CC} = 2.0$ V	-	18	155	ns
		$V_{CC} = 4.5$ V	-	12	31	ns
		$V_{CC} = 6.0$ V	-	11	26	ns
C_{PD}	power dissipation capacitance	$V_I = \text{GND to } V_{CC}$	[3]	-	30	pF
$T_{amb} = -40$ °C to $+125$ °C						
t_{pd}	propagation delay	A to Y; see Figure 5	[2]			
		$V_{CC} = 2.0$ V	-	-	150	ns
		$V_{CC} = 4.5$ V	-	-	30	ns
		$V_{CC} = 6.0$ V	-	-	26	ns
t_{en}	enable time	\overline{OE} to Y; see Figure 6	[2]			
		$V_{CC} = 2.0$ V	-	-	190	ns
		$V_{CC} = 4.5$ V	-	-	38	ns
		$V_{CC} = 6.0$ V	-	-	32	ns
t_{dis}	disable time	\overline{OE} to Y; see Figure 6	[2]			
		$V_{CC} = 2.0$ V	-	-	190	ns
		$V_{CC} = 4.5$ V	-	-	38	ns
		$V_{CC} = 6.0$ V	-	-	32	ns

[1] All typical values are measured at $T_{amb} = 25$ °C.

[2] t_{pd} is the same as t_{PLH} and t_{PHL} .

t_{en} is the same as t_{PZL} and t_{PZH} .

t_{dis} is the same as t_{PLZ} and t_{PHZ} .

[3] C_{PD} is used to determine the dynamic power dissipation (P_D in μ W).

$P_D = C_{PD} \times V_{CC}^2 \times f_i \times N + \Sigma(C_L \times V_{CC}^2 \times f_o)$ where:

f_i = input frequency in MHz;

f_o = output frequency in MHz;

C_L = output load capacitance in pF;

V_{CC} = supply voltage in V;

N = number of inputs switching;

$\Sigma(C_L \times V_{CC}^2 \times f_o)$ = sum of the outputs.

Table 10. Dynamic characteristics 74HCT1G125-Q100

Voltages are referenced to GND (ground = 0 V); $C_L = 50$ pF unless otherwise specified; for test circuit see [Figure 7](#)

Symbol	Parameter	Conditions	Min	Typ ^[1]	Max	Unit
$T_{amb} = -40\text{ °C to }+85\text{ °C}$						
t_{pd}	propagation delay	A to Y; see Figure 5	[2]			
		$V_{CC} = 4.5\text{ V}$	-	11	30	ns
		$V_{CC} = 5\text{ V}; C_L = 15\text{ pF}$	-	10	-	ns
t_{en}	enable time	$V_{CC} = 4.5\text{ V}; \overline{OE}$ to Y; see Figure 6	[2] -	10	35	ns
t_{dis}	disable time	$V_{CC} = 4.5\text{ V}; \overline{OE}$ to Y; see Figure 6	[2] -	11	31	ns
C_{PD}	power dissipation capacitance	$V_I = \text{GND to } V_{CC} - 1.5\text{ V}$	[3] -	27	-	pF
$T_{amb} = -40\text{ °C to }+125\text{ °C}$						
t_{pd}	propagation delay	$V_{CC} = 4.5\text{ V}; A$ to Y; see Figure 5	[2] -	-	36	ns
t_{en}	enable time	$V_{CC} = 4.5\text{ V}; \overline{OE}$ to Y; see Figure 6	[2] -	-	42	ns
t_{dis}	disable time	$V_{CC} = 4.5\text{ V}; \overline{OE}$ to Y; see Figure 6	[2] -	-	38	ns

[1] All typical values are measured at $T_{amb} = 25\text{ °C}$.

[2] t_{pd} is the same as t_{PLH} and t_{PHL} .

t_{en} is the same as t_{PZL} and t_{PZH} .

t_{dis} is the same as t_{PLZ} and t_{PHZ} .

[3] C_{PD} is used to determine the dynamic power dissipation (P_D in μW).

$P_D = C_{PD} \times V_{CC}^2 \times f_i \times N + \Sigma(C_L \times V_{CC}^2 \times f_o)$ where:

f_i = input frequency in MHz;

f_o = output frequency in MHz;

C_L = output load capacitance in pF;

V_{CC} = supply voltage in V;

N = number of inputs switching;

$\Sigma(C_L \times V_{CC}^2 \times f_o)$ = sum of the outputs.

12. Waveforms

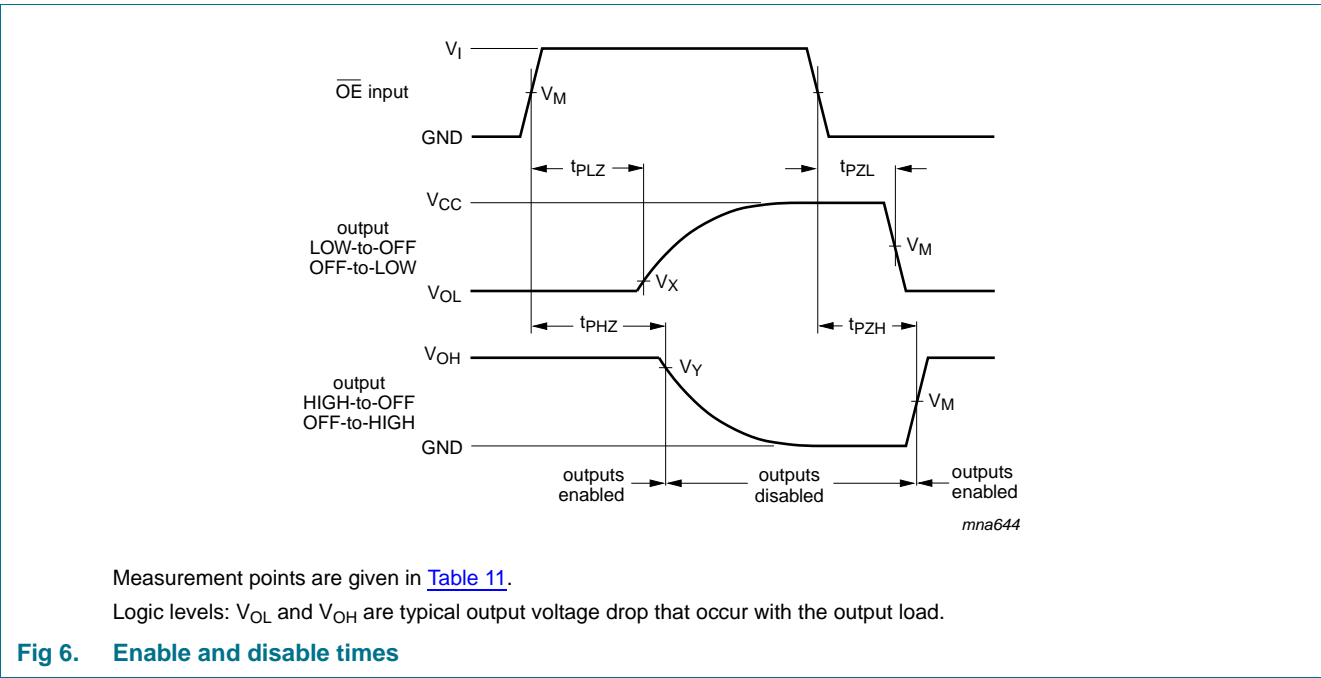
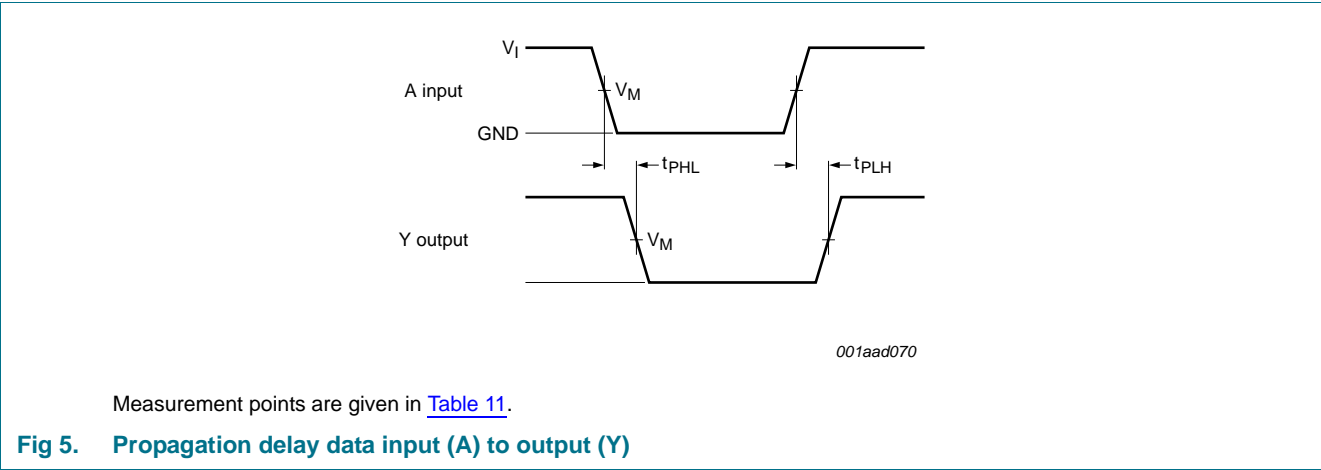


Table 11. Measurement points

Type	Input	Output		
	V_M	V_M	V_X	V_Y
74HC1G125-Q100	$0.5V_{CC}$	$0.5V_{CC}$	$V_{OL} + 0.3\text{ V}$	$V_{OH} - 0.3\text{ V}$
74HCT1G125-Q100	1.3 V	1.3 V	$V_{OL} + 0.3\text{ V}$	$V_{OH} - 0.3\text{ V}$

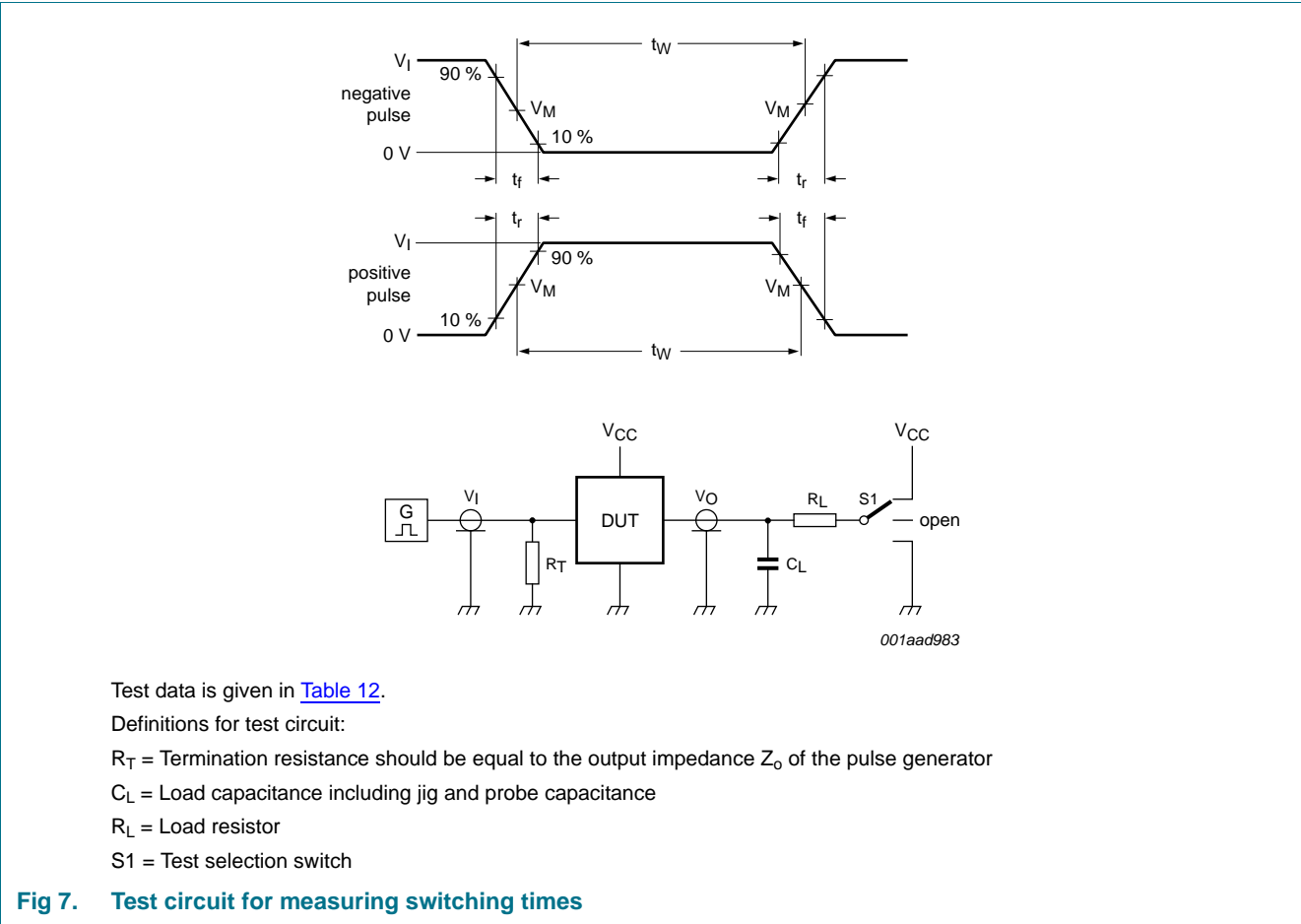


Table 12. Test data

Type	Input		Load		S1 position		
	V_I	t_r, t_f	C_L	R_L	t_{PLH}, t_{PHL}	t_{PZH}, t_{PHZ}	t_{PZL}, t_{PLZ}
74HC1G125-Q100	V_{CC}	6 ns	15 pF, 50 pF	1 k Ω	open	GND	V_{CC}
74HCT1G125-Q100	3 V	6 ns	15 pF, 50 pF	1 k Ω	open	GND	V_{CC}

13. Package outline

TSSOP5: plastic thin shrink small outline package; 5 leads; body width 1.25 mm

SOT353-1

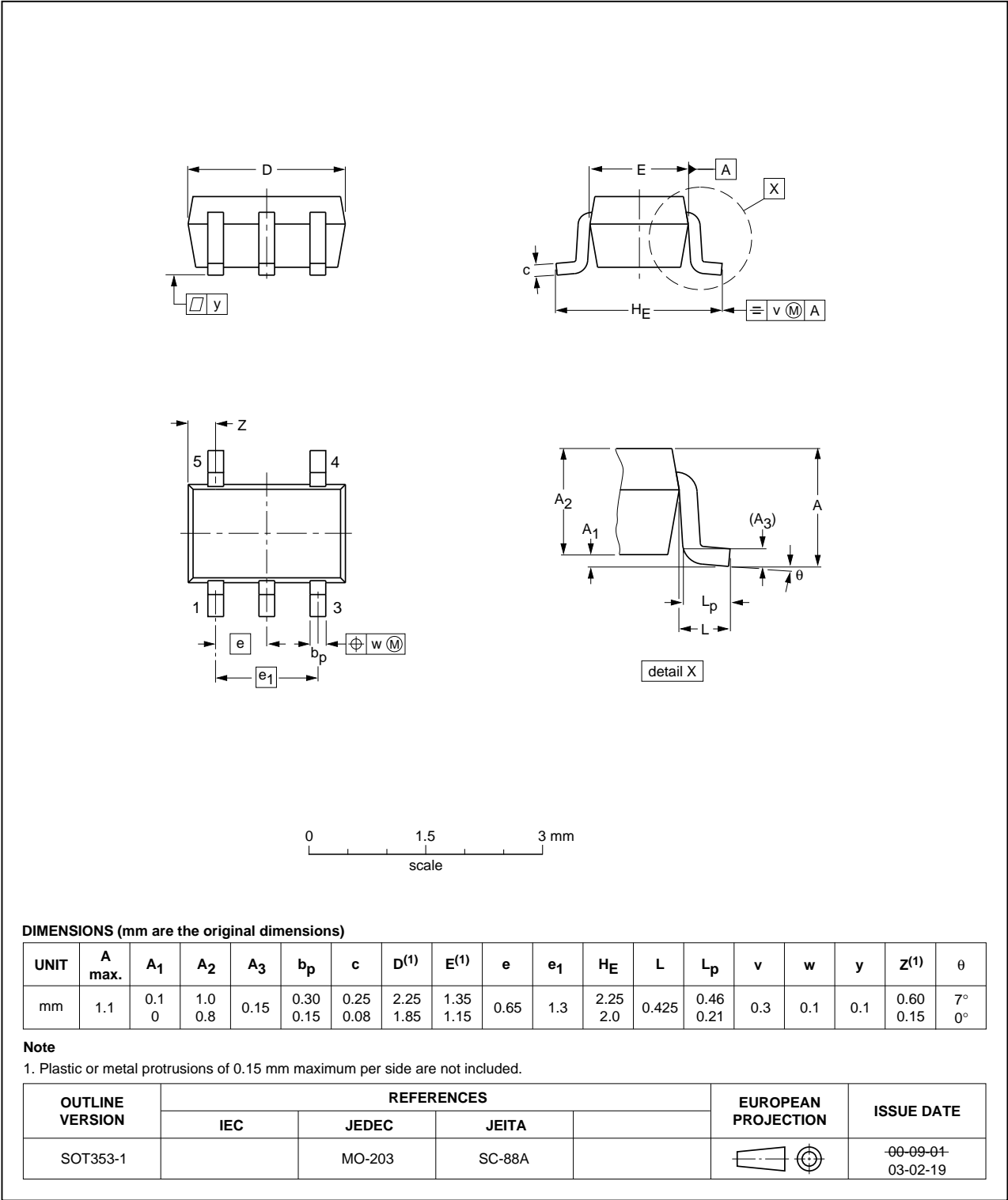


Fig 8. Package outline SOT353-1 (TSSOP5)

Plastic surface-mounted package; 5 leads

SOT753

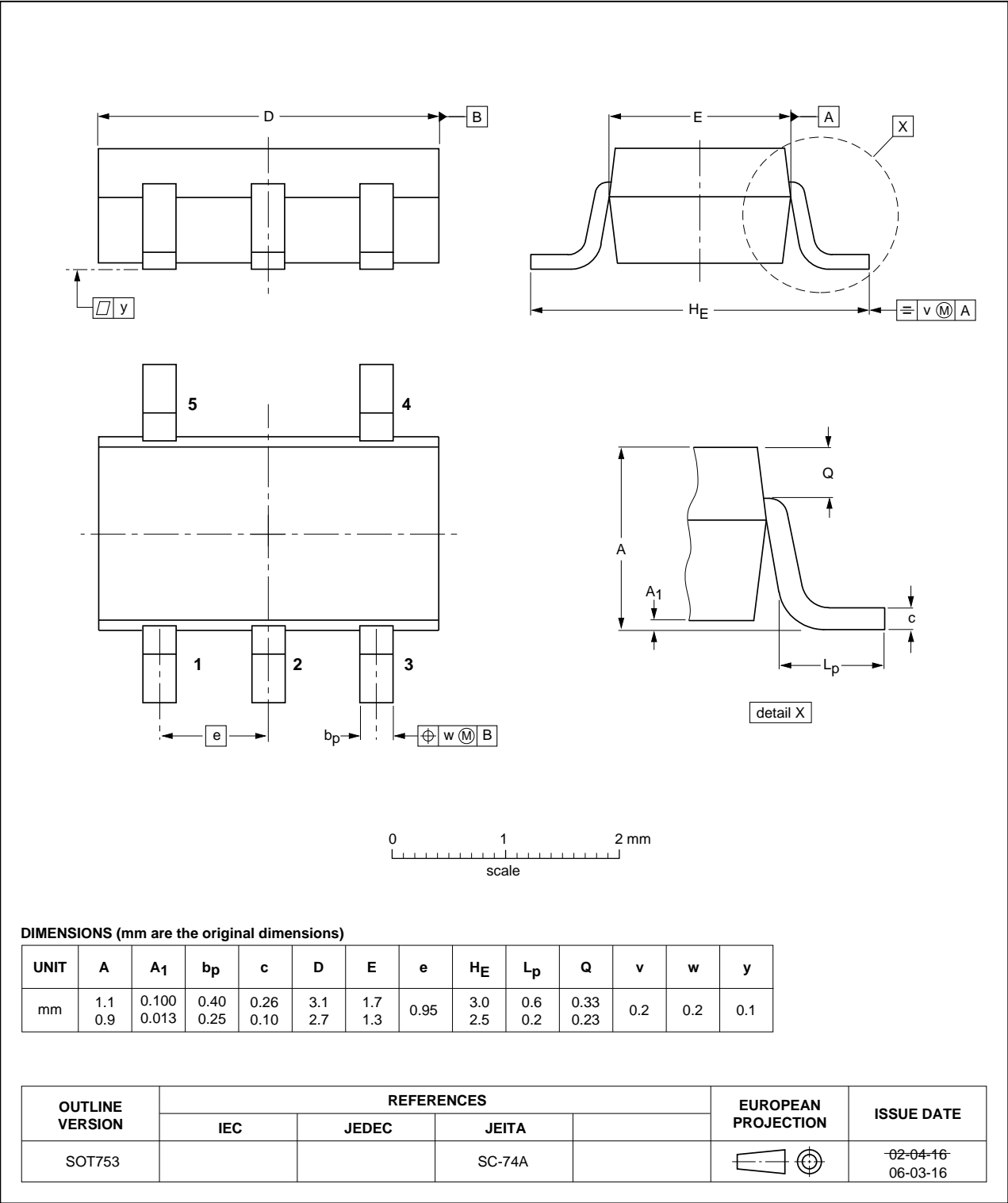


Fig 9. Package outline SOT753 (SC-74A)

14. Abbreviations

Table 13. Abbreviations

Acronym	Description
CMOS	Complementary Metal Oxide Semiconductor
ESD	ElectroStatic Discharge
HBM	Human Body Model
TTL	Transistor-Transistor Logic
MM	Machine Model

15. Revision history

Table 14. Revision history

Document ID	Release date	Data sheet status	Change notice	Supersedes
74HC_HCT1G125_Q100 v.1	20130618	Product data sheet	-	-

16. Legal information

16.1 Data sheet status

Document status ^{[1][2]}	Product status ^[3]	Definition
Objective [short] data sheet	Development	This document contains data from the objective specification for product development.
Preliminary [short] data sheet	Qualification	This document contains data from the preliminary specification.
Product [short] data sheet	Production	This document contains the product specification.

[1] Please consult the most recently issued document before initiating or completing a design.

[2] The term 'short data sheet' is explained in section "Definitions".

[3] The product status of device(s) described in this document may have changed since this document was published and may differ in case of multiple devices. The latest product status information is available on the Internet at URL <http://www.nexperia.com>.

16.2 Definitions

Draft — The document is a draft version only. The content is still under internal review and subject to formal approval, which may result in modifications or additions. Nexperia does not give any representations or warranties as to the accuracy or completeness of information included herein and shall have no liability for the consequences of use of such information.

Short data sheet — A short data sheet is an extract from a full data sheet with the same product type number(s) and title. A short data sheet is intended for quick reference only and should not be relied upon to contain detailed and full information. For detailed and full information see the relevant full data sheet, which is available on request via the local Nexperia sales office. In case of any inconsistency or conflict with the short data sheet, the full data sheet shall prevail.

Product specification — The information and data provided in a Product data sheet shall define the specification of the product as agreed between Nexperia and its customer, unless Nexperia and customer have explicitly agreed otherwise in writing. In no event however, shall an agreement be valid in which the Nexperia product is deemed to offer functions and qualities beyond those described in the Product data sheet.

16.3 Disclaimers

Limited warranty and liability — Information in this document is believed to be accurate and reliable. However, Nexperia does not give any representations or warranties, expressed or implied, as to the accuracy or completeness of such information and shall have no liability for the consequences of use of such information. Nexperia takes no responsibility for the content in this document if provided by an information source outside of Nexperia.

In no event shall Nexperia be liable for any indirect, incidental, punitive, special or consequential damages (including - without limitation - lost profits, lost savings, business interruption, costs related to the removal or replacement of any products or rework charges) whether or not such damages are based on tort (including negligence), warranty, breach of contract or any other legal theory.

Notwithstanding any damages that customer might incur for any reason whatsoever, Nexperia's aggregate and cumulative liability towards customer for the products described herein shall be limited in accordance with the *Terms and conditions of commercial sale* of Nexperia.

Right to make changes — Nexperia reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.

Suitability for use in automotive applications — This Nexperia product has been qualified for use in automotive applications. Unless otherwise agreed in writing, the product is not designed, authorized or warranted to be suitable for use in life support, life-critical or safety-critical systems or equipment, nor in applications where failure or malfunction of a Nexperia product can reasonably be expected to result in personal injury, death or severe property or environmental damage. Nexperia and its suppliers accept no liability for inclusion and/or use of Nexperia products in such equipment or applications and therefore such inclusion and/or use is at the customer's own risk.

Applications — Applications that are described herein for any of these products are for illustrative purposes only. Nexperia makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.

Customers are responsible for the design and operation of their applications and products using Nexperia products, and Nexperia accepts no liability for any assistance with applications or customer product design. It is customer's sole responsibility to determine whether the Nexperia product is suitable and fit for the customer's applications and products planned, as well as for the planned application and use of customer's third party customer(s). Customers should provide appropriate design and operating safeguards to minimize the risks associated with their applications and products.

Nexperia does not accept any liability related to any default, damage, costs or problem which is based on any weakness or default in the customer's applications or products, or the application or use by customer's third party customer(s). Customer is responsible for doing all necessary testing for the customer's applications and products using Nexperia products in order to avoid a default of the applications and the products or of the application or use by customer's third party customer(s). Nexperia does not accept any liability in this respect.

Limiting values — Stress above one or more limiting values (as defined in the Absolute Maximum Ratings System of IEC 60134) will cause permanent damage to the device. Limiting values are stress ratings only and (proper) operation of the device at these or any other conditions above those given in the Recommended operating conditions section (if present) or the Characteristics sections of this document is not warranted. Constant or repeated exposure to limiting values will permanently and irreversibly affect the quality and reliability of the device.

Terms and conditions of commercial sale — Nexperia products are sold subject to the general terms and conditions of commercial sale, as published at <http://www.nexperia.com/profile/terms>, unless otherwise agreed in a valid written individual agreement. In case an individual agreement is concluded only the terms and conditions of the respective agreement shall apply. Nexperia hereby expressly objects to applying the customer's general terms and conditions with regard to the purchase of Nexperia products by customer.

No offer to sell or license — Nothing in this document may be interpreted or construed as an offer to sell products that is open for acceptance or the grant, conveyance or implication of any license under any copyrights, patents or other industrial or intellectual property rights.

Export control — This document as well as the item(s) described herein may be subject to export control regulations. Export might require a prior authorization from competent authorities.

Translations — A non-English (translated) version of a document is for reference only. The English version shall prevail in case of any discrepancy between the translated and English versions.

16.4 Trademarks

Notice: All referenced brands, product names, service names and trademarks are the property of their respective owners.

17. Contact information

For more information, please visit: <http://www.nexperia.com>

For sales office addresses, please send an email to: salesaddresses@nexperia.com

18. Contents

1	General description	1
2	Features and benefits	1
3	Ordering information	1
4	Marking	2
5	Functional diagram	2
6	Pinning information	2
6.1	Pinning	2
6.2	Pin description	3
7	Functional description	3
7.1	Function table	3
8	Limiting values	3
9	Recommended operating conditions	4
10	Static characteristics	4
11	Dynamic characteristics	7
12	Waveforms	9
13	Package outline	11
14	Abbreviations	13
15	Revision history	13
16	Legal information	14
16.1	Data sheet status	14
16.2	Definitions	14
16.3	Disclaimers	14
16.4	Trademarks	15
17	Contact information	15
18	Contents	16

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: org@lifeelectronics.ru

www.lifeelectronics.ru