

TND323VD

Recommend Operating Conditions at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Operating Supply Voltage	V _{DD}		4.5 to 25	V
Operating Temperature	Topr		-40 to +125	°C

Electrical Characteristics (AC Characteristics) at Ta=25°C, V_{DD}=18V, V_{IN}=5V

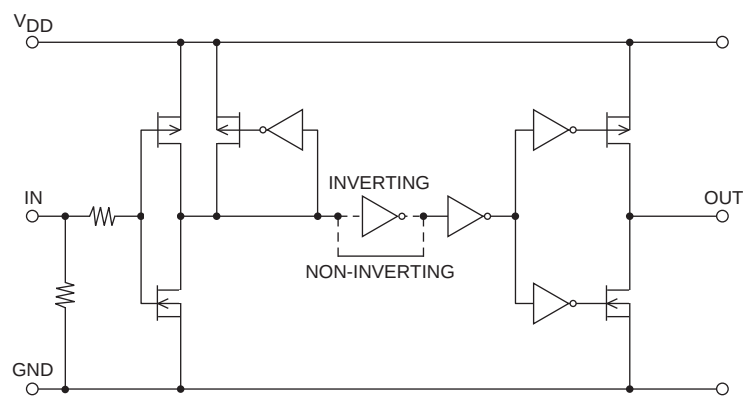
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Turn-On Rise Time	t _r	C _L =1000pF		35	50	ns
Turn-Off Fall Time	t _f	C _L =1000pF		30	45	ns
Delay Time	t _{D1}	C _L =1000pF		30	45	ns
	t _{D2}	C _L =1000pF		45	60	ns

Electrical Characteristics (DC Characteristics) at Ta=25°C, V_{DD}=4.5 to 25V

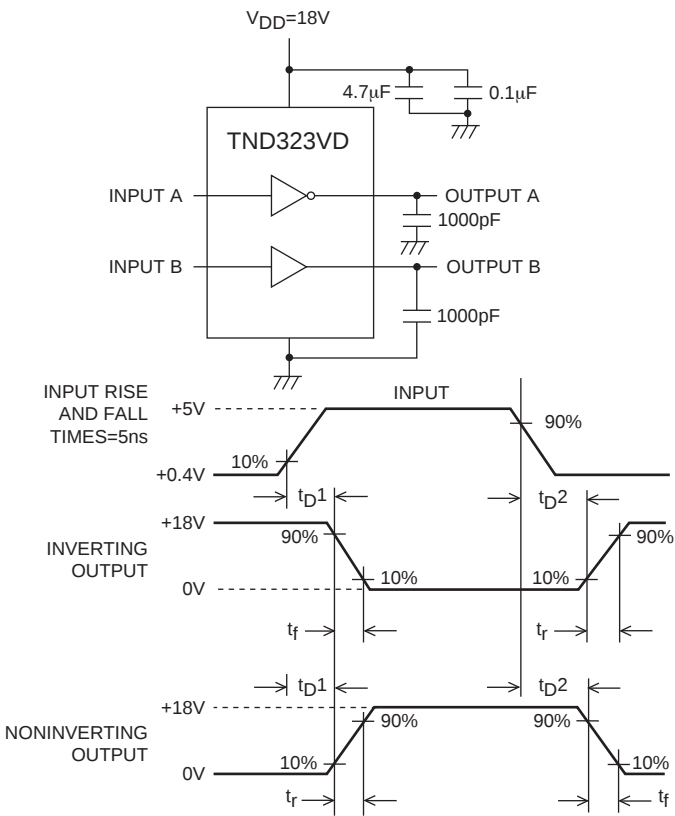
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Logic "1" Input Voltage	V _{IH}		2.6			V
Logic "0" Input Voltage	V _{IL}				0.8	V
Logic "1" Input Bias Current	I _{IN+}	V _{IN} =V _{DD} =25V		40	100	μA
Logic "0" Input Bias Current	I _{IN-}	V _{IN} =0V	-1		1	μA
High-level Output Voltage	V _{OH}	I _O =0A	V _{DD} -0.1			V
Low-level Output Voltage	V _{OL}	I _O =0A			0.1	V
V _{DD} Supply Current	I _{supp}	V _{DD} =10V, V _{IN} =3V, (both inputs)		1.0	4.5	mA
		V _{DD} =10V, V _{IN} =0V, (both inputs)			0.2	mA
Output High Short Circuit Pulsed Current	I _{O+}	V _{DD} =18V, PW≤10μs, V _{OUT} =0V		0.8		A
Output Low Short Circuit Pulsed Current	I _{O-}	V _{DD} =18V, PW≤10μs, V _{OUT} =18V		1.0		A
Output On Resistance	ROUT	V _{DD} =18V, I _{load} =10mA, V _{OUT} ="H"		11	16.5	Ω
		V _{DD} =18V, I _{load} =10mA, V _{OUT} ="L"		6	10	Ω

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Block Diagram

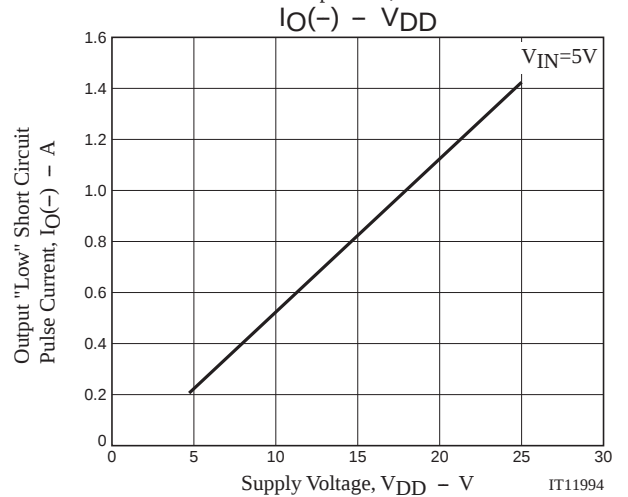
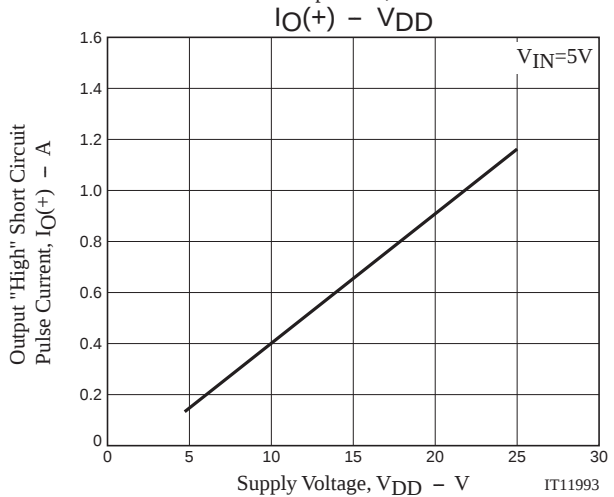
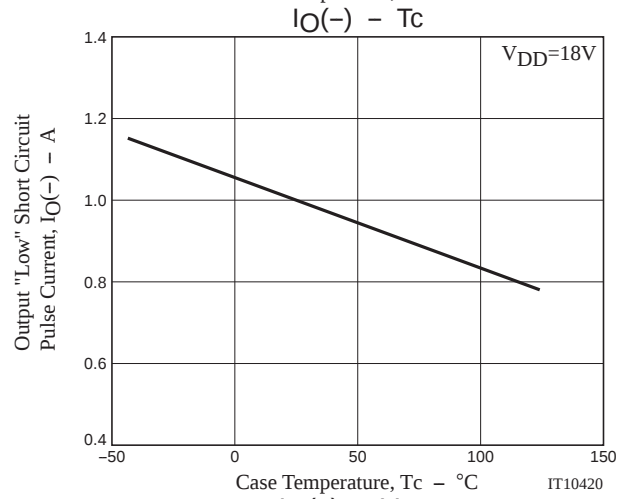
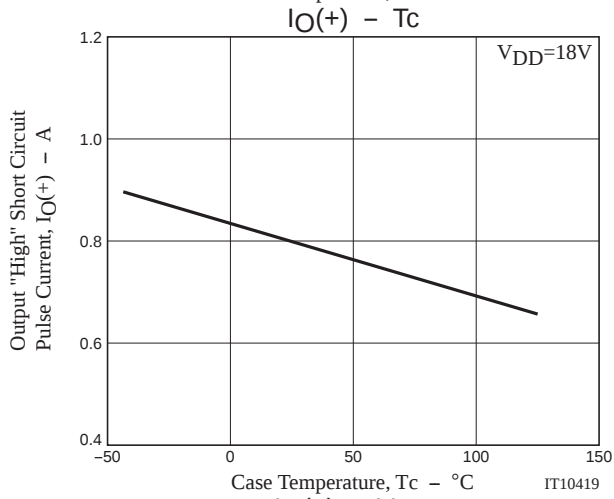
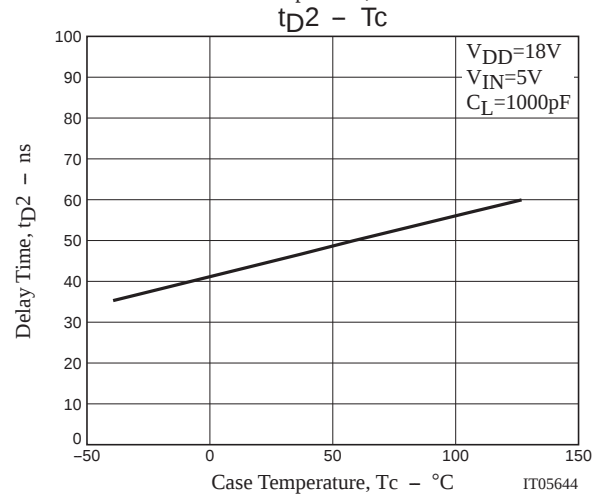
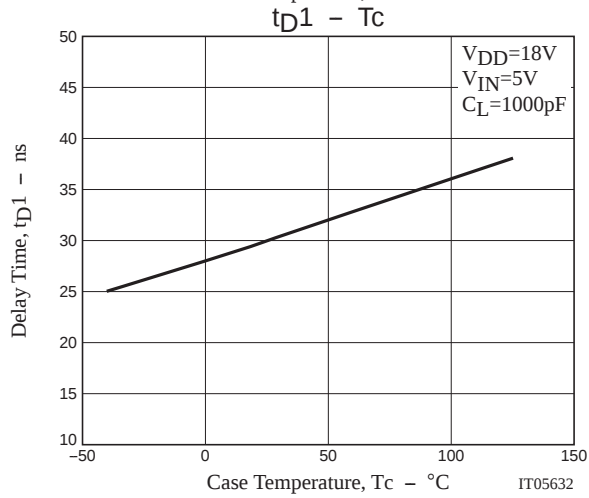
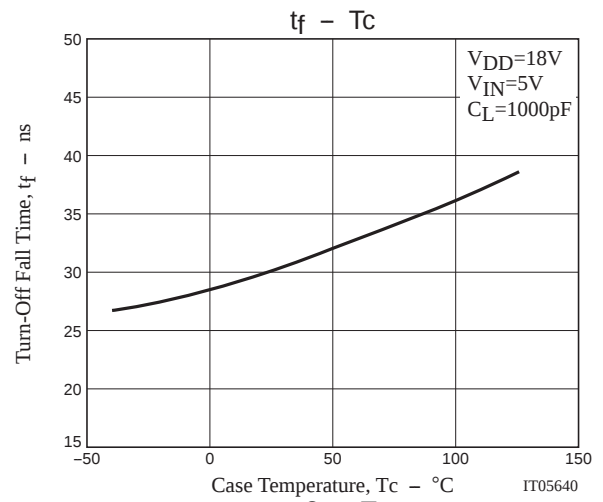
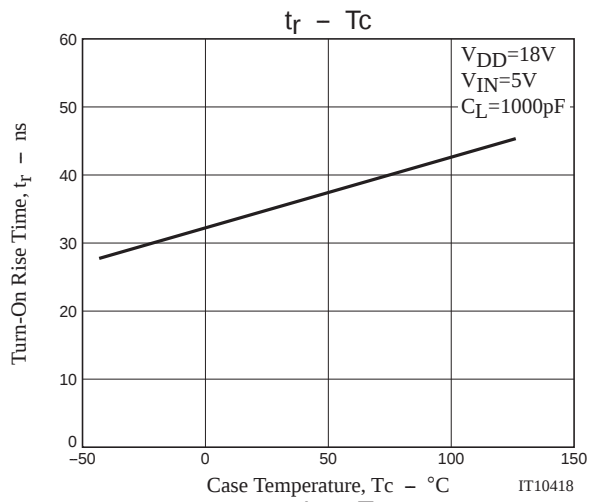


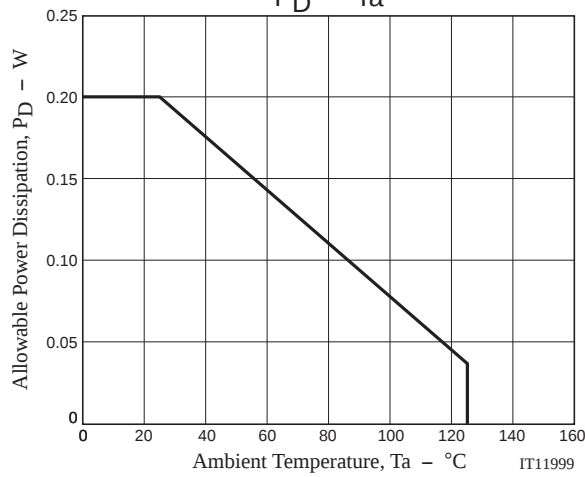
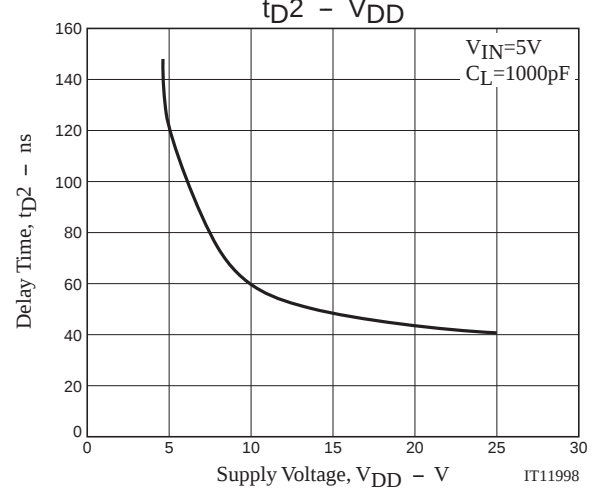
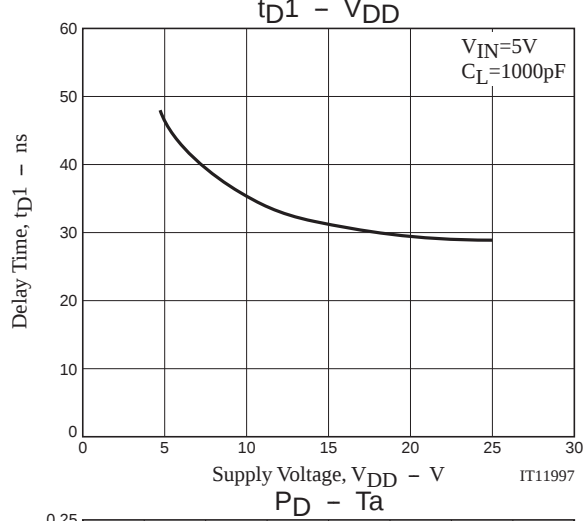
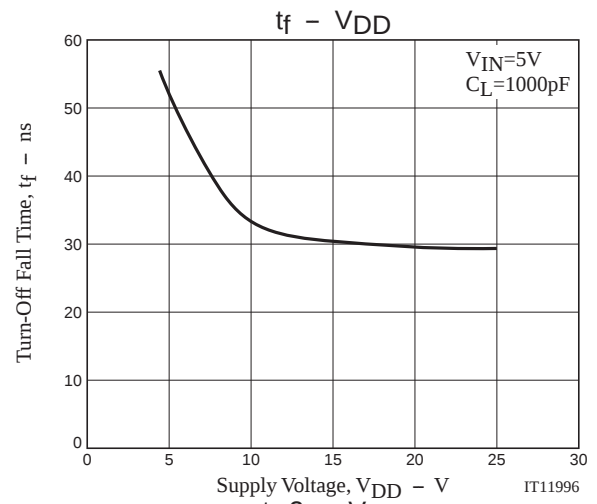
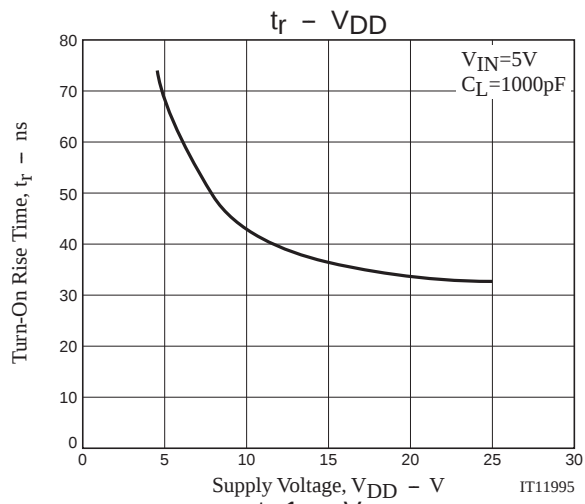
Switching Time Test Circuit



Ordering Information

Device	Package	Shipping	memo
TND323VD-TL-E	VEC8	3,000pcs./reel	Pb Free





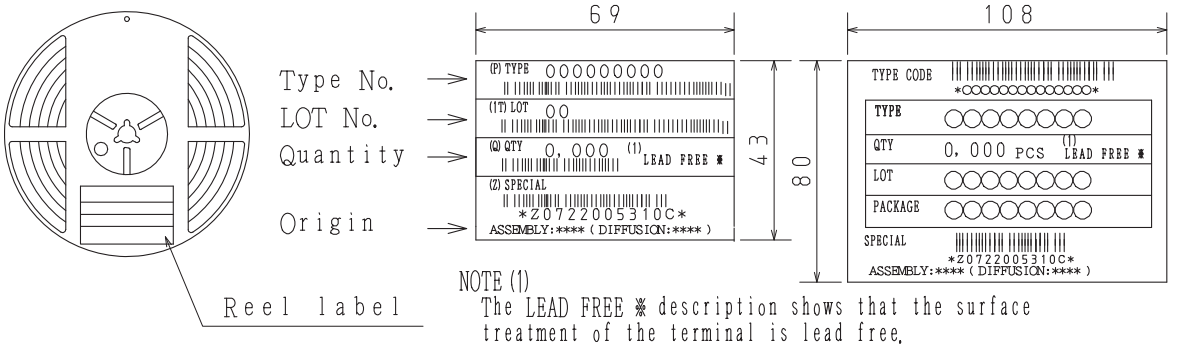
Taping Specification

TND323VD-TL-E

1. Packing Format

Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
VEC8	CPH6	3,000	15,000	90,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

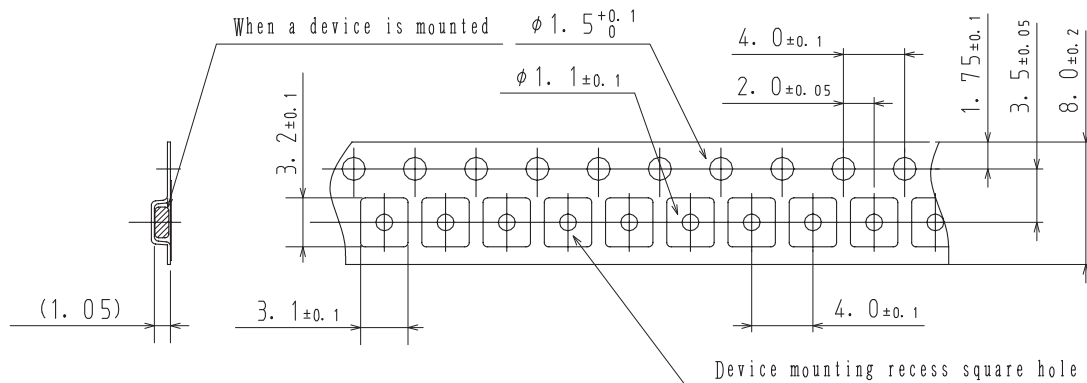
Packing method



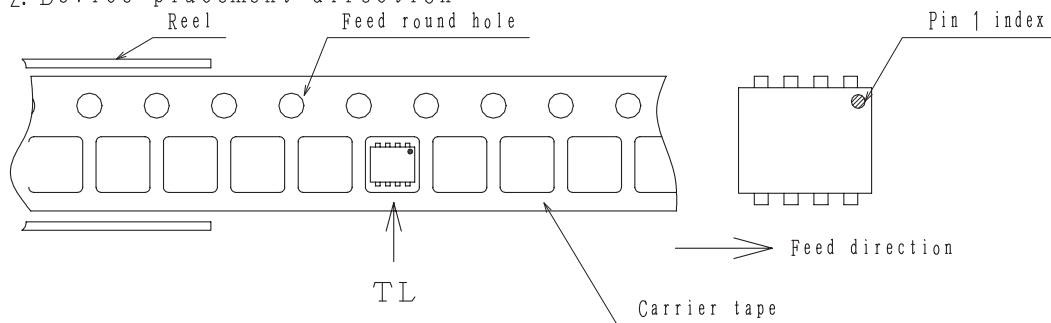
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

2-1. Carrier tape size (unit:mm)

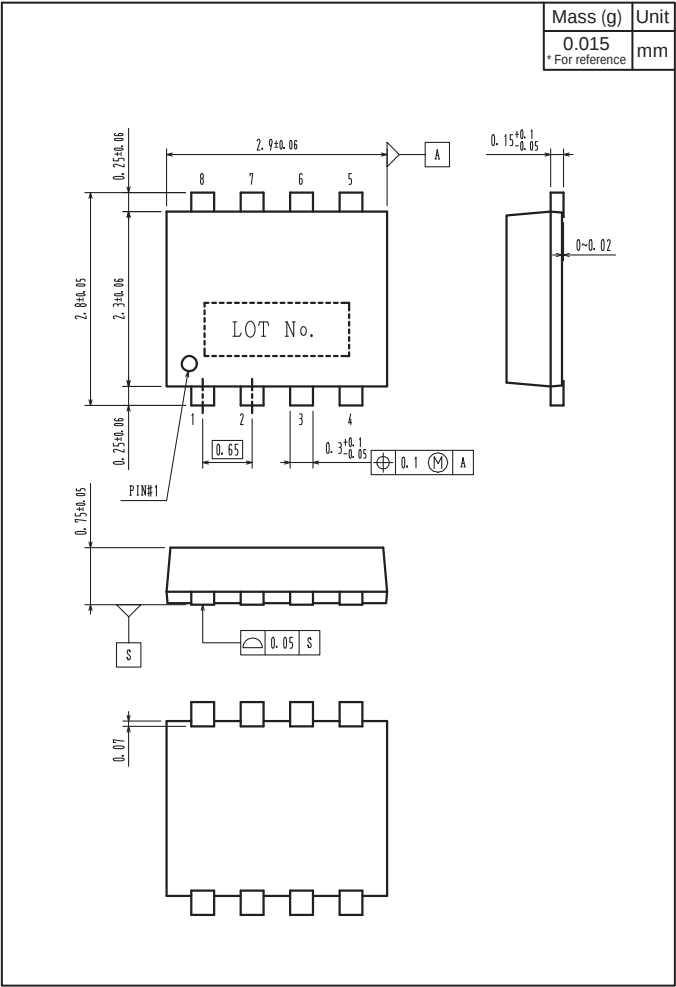


2-2. Device placement direction

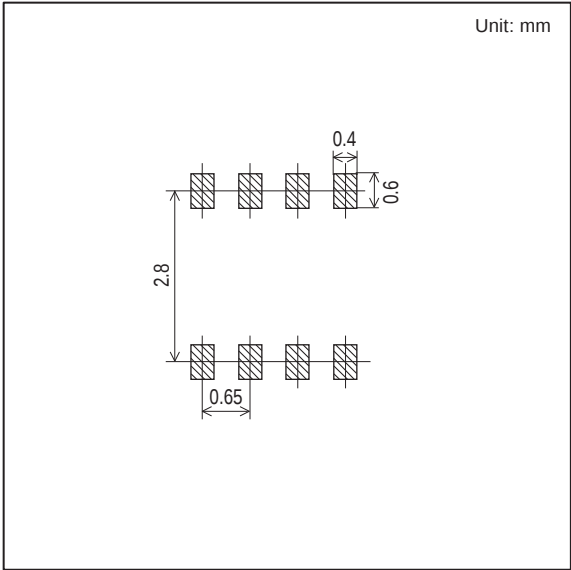


Outline Drawing

TND323VD-TL-E



Land Pattern Example



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