

- CMOS Output Crystal Oscillator -

Type : CX504 Series

RoHS

- Frequency Range : 1MHz to 166MHz
- Output Level = CMOS/TTL
- Fine Jitter Performance.
- AT-cut Crystal and seam weld.

Output Level	CMOS
Supply Voltage	+3.3Vdd +/-5%
Size	5.0 × 3.2 × 1.3mm

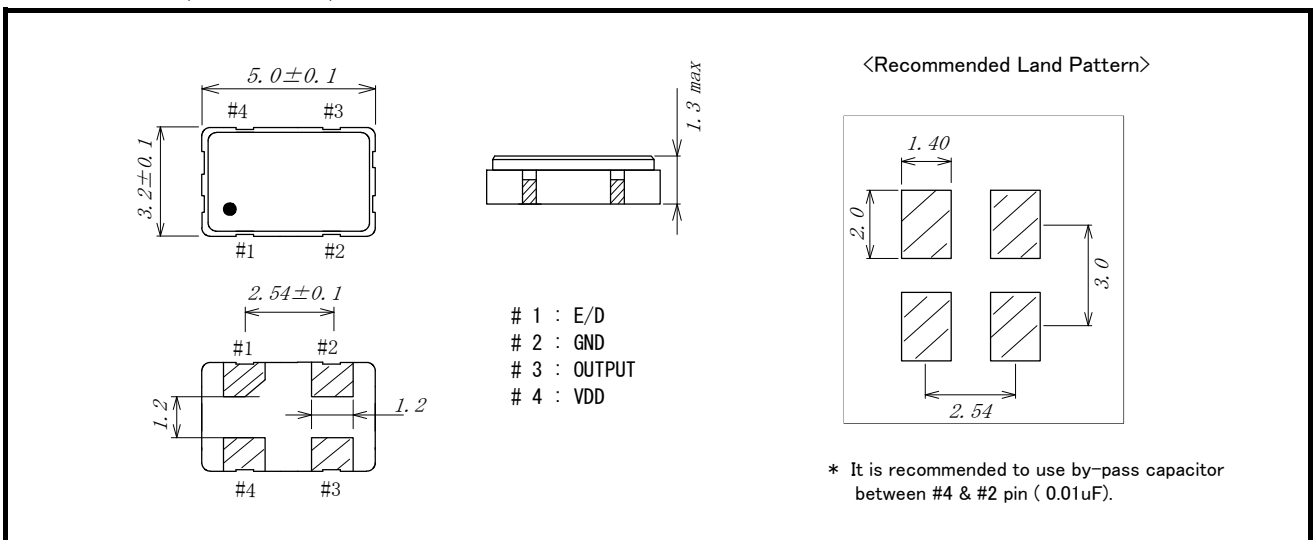


- Electrical Specifications -

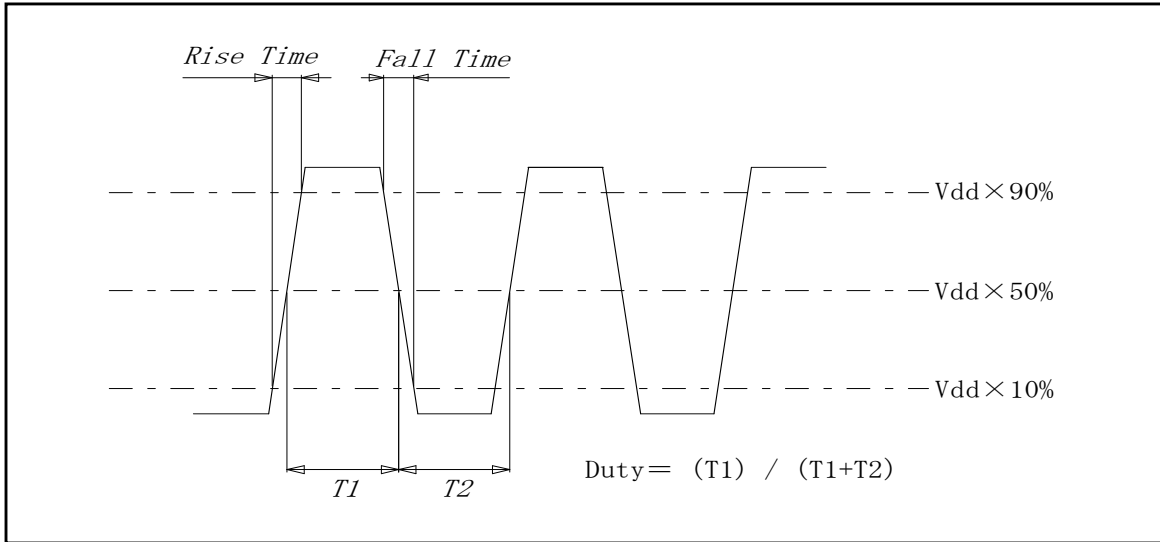
Item	Condition	MIN	TYP	MAX	Unit
Frequency Range		1	-	106	MHz
Supply voltage		+3.135	+3.3	+3.465	V
Frequency Stability (Including Ope.Temp. Aging of 1st year)	Option : B	-	-	+/- 50	PPM
	Option : H	-	-	+/- 30	PPM
	Option : A	-	-	+/- 25	PPM
	Option : G	-	-	+/- 20	PPM
Operating Temperature	Option : S	0	-	+70	deg.c
	Option : A	-20	-	+70	deg.c
	Option : B	-40	-	+85	deg.c
	Option : C	-10	-	+70	deg.c
Storage Temperature	Parts only	-50	-	+125	deg.c
Output Level	VOH	Vdd-0.4	-	-	V
	VOL	-	-	0.4	V
Rise & Fall Time	1MHz to 27MHz / CL=15pF	-	-	6.0	ns
	27.1MHz to 69.9MHz / CL=15pF	-	-	4.0	ns
	from 70MHz / CL=15pF	-	-	2.5	ns
Duty	@ 1/2 Vdd	45	-	55	%
Current	1MHz to 24.9MHz / CL=15pF	-	-	10	mA
	25.1MHz to 69.9MHz / CL=15pF	-	-	35	mA
	70MHz~106.9MHz / CL=15pF	-	-	60	mA
	from 107MHz / CL=15pF	-	-	100	mA
Output Load	CMOS	15			pF
RMS Jitter	12KHz to 20MHz offset (@ Fo = 125MHz)	-	-	0.2	ps
Start-up Time		-	-	10	ms
E/D Function	#1pin = Hi or Open : Enable / Low : Disable				

* 1) Frequency stability : "G" can not be available with Temperature Range of "B".

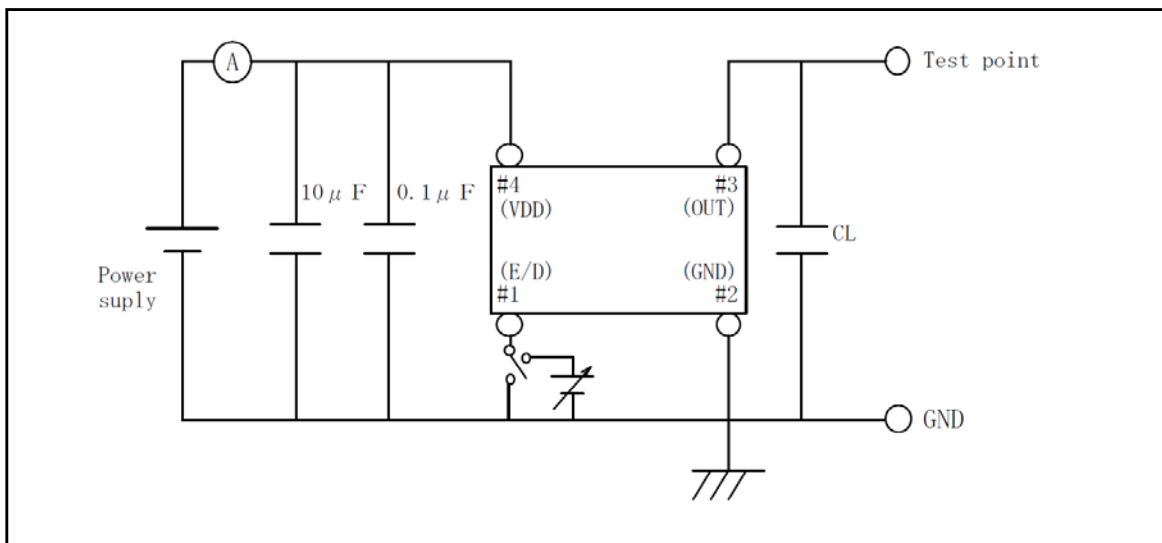
● Dimension (Unit: in mm)



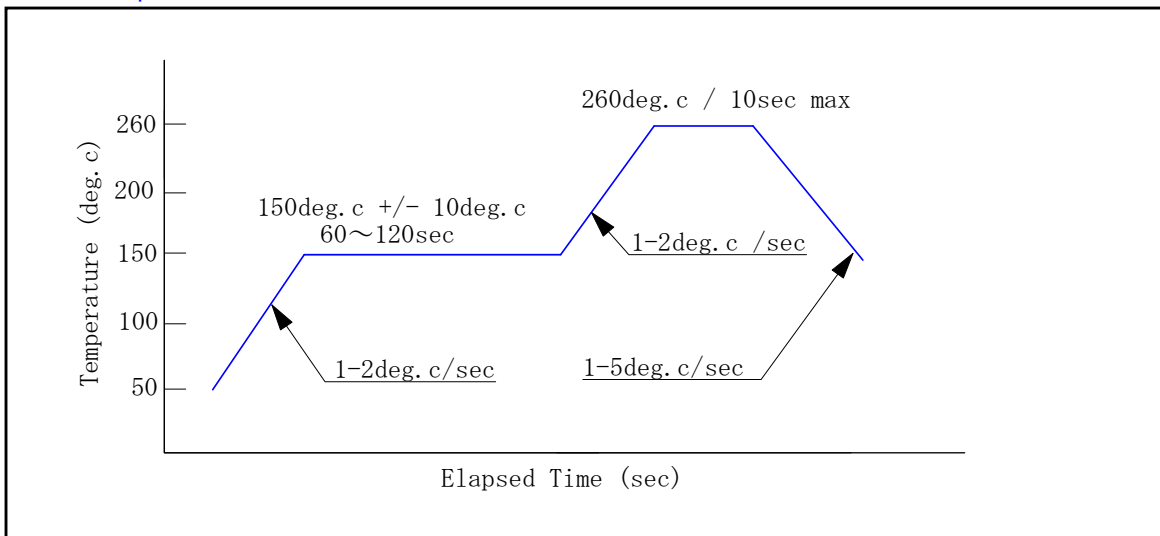
● Wave Form



● Test Circuit



● Reflow profile

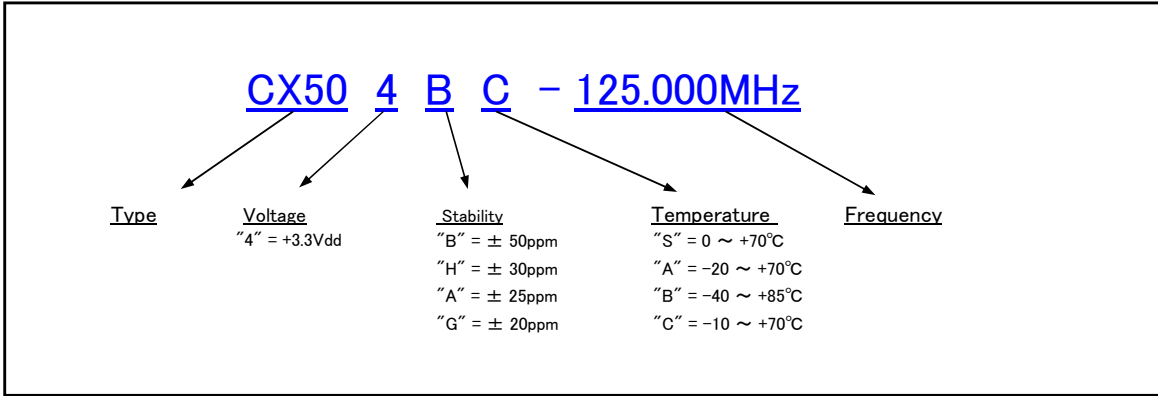


* The reflow process can be allowed until 2 times.

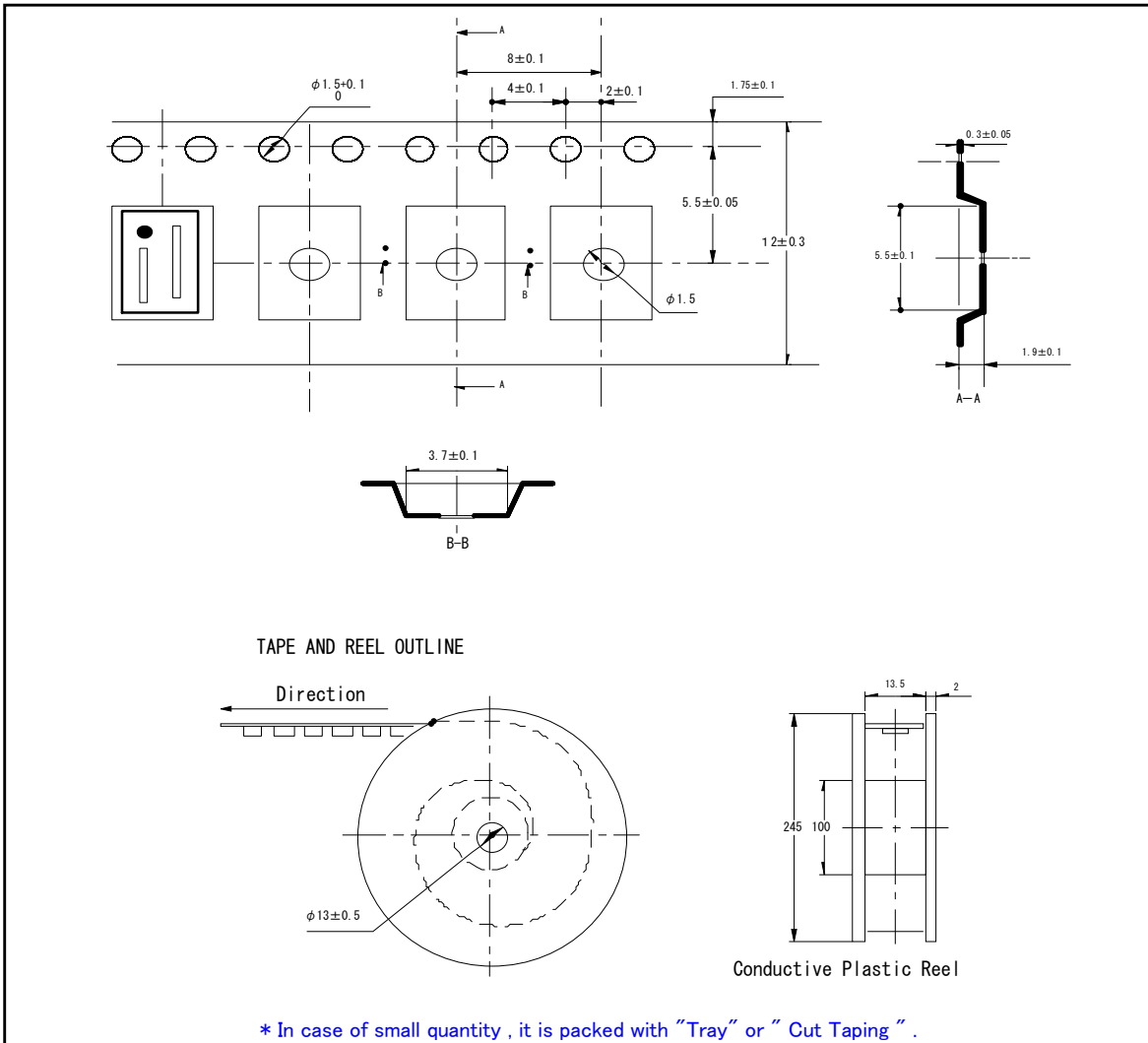
* In case of manual soldering ; using soldering iron at +360deg.c \pm 20deg.c , within 3sec (per each 1pad)

* This product includes CMOS device, then please handle it with protected process against ESD.

● How to define Model Number



● Taping & Reel dimension



2013.05.02 Rev.A

TamaDevice

Solution & Development

(URL) <http://www.tamadevice.co.jp>

(E-MAIL) info@tamadevice.co.jp

(TEL) +81-44-945-8028 (FAX) +81-44-945-8486