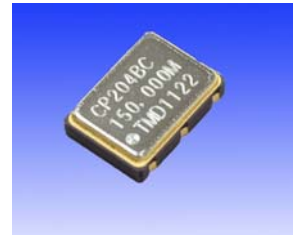


- LV-PECL Output Crystal Oscillator -

TYPE : CP28V / CP284****

RoHS

- LV-PECL output SPXO (13.5MHz to 220MHz)
- Excellent performance / Low jitter and high stability vs temperature
- High speed switching (Tr/Tf=0.2ns Typ.) , low consumption
- RoHS compliant



Supply Voltage	+2.5Vdd or +3.3Vdd
Output Level	LV-PECL
Dimension	7.0*5.0*1.8mm

- Electrical Specifications -

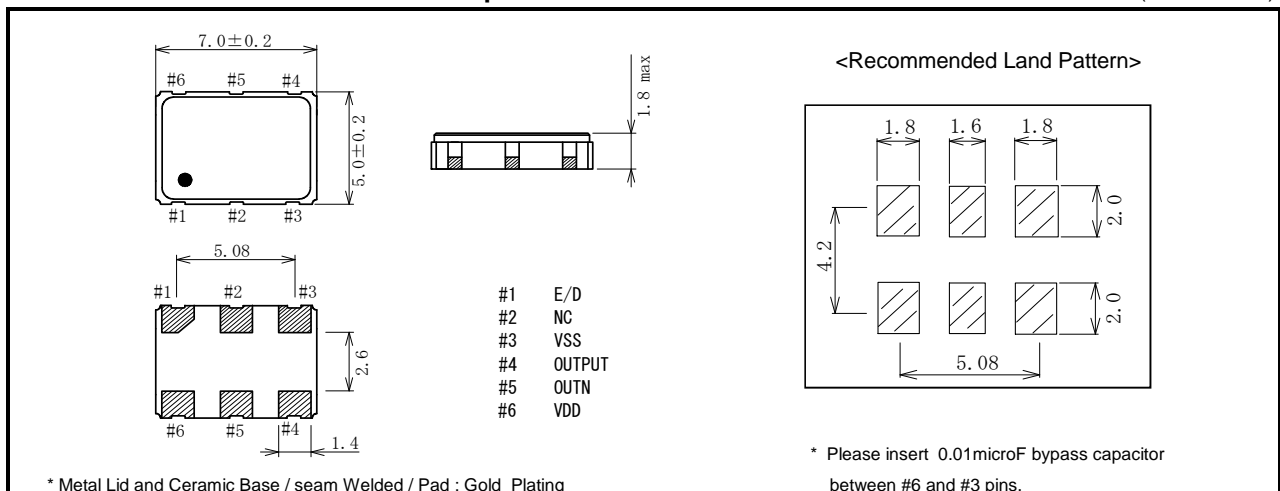
* +3.3Vdd = < CP284* * > +2.5Vdd = < CP28V* * >

Item	Condition	MIN	TYP	MAX	UNIT
Frequency Range (Fo)		13.5	-	220	MHz
Supply Voltage	Vdd=+3.3V	+3.135	-	+3.465	V
	Vdd=+2.5V	+2.375	-	+2.625	
Total Frequency Accuracy (Including accuracy, supply voltage change, 1st year aging)	(G) option	-20	-	+20	PPM
	(A) option	-25	-	+25	
	(B) option	-50	-	+50	
	(C) option	-100	-	+100	
Operating temperature	(S) option	0	-	+70	deg.c
	(A) option	-20	-	+70	
	(B) option	-40	-	+85	
	(C) option	-10	-	+70	
Storage temperature		-50	-	+125	
Output Level	Vdd = 3.3V / VOH	2.275	-	-	V
	Vdd = 3.3V / VOL	-	-	1.680	
	Vdd = 2.5V / VOH	1.475	-	-	
	Vdd = 2.5V / VOL	-	-	1.095	
Rise Time	20% → 80%	-	0.2	0.5	ns
Fall Time	80% → 20%	-	0.2	0.5	
Duty	@ 1/2 Vdd	45	-	55	%
Offset Level	Vdd = 3.3V	1.3 (Vdd-2.0)			V
	Vdd = 2.5V	0.5 (Vdd-2.0)			
Current Consumption	250MHz / Vdd = +3.3V	-	-	50	mA
	250MHz / Vdd = +2.5V	-	-	50	
Load	Vdd - 2.0V	50			Ohm
RMS jitter *1	Offset : 12kHz to 20MHz	-	0.2 - 0.3	-	ps
Start Up Time		-	-	10	mA
E/D function	#1pin = Hi or Open : Output Enable / Low : Output Disable				

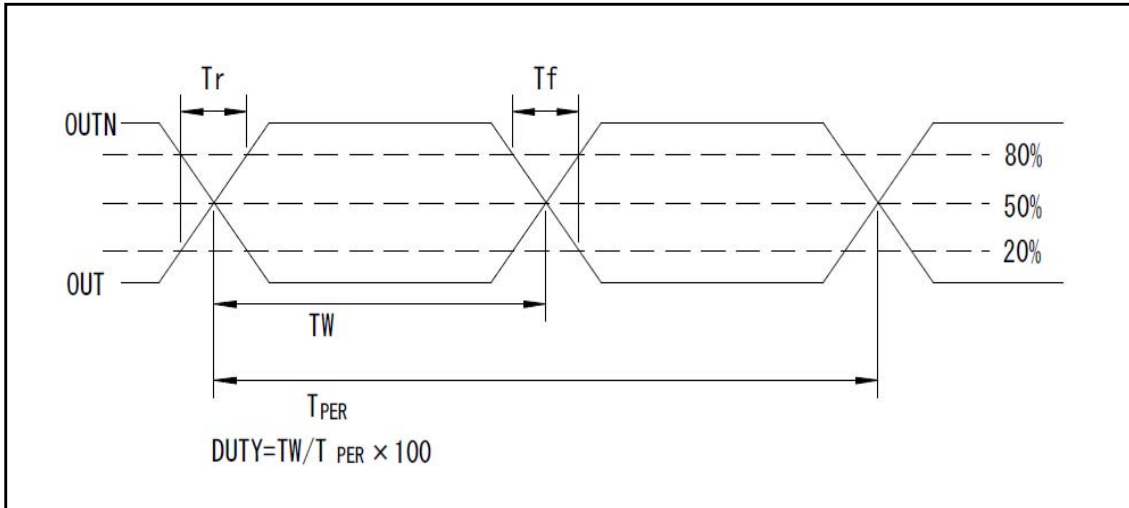
1*) Measured with E5052B signal source analyzer (Agilent technology).
(Typical RMS Jitter value is depending on Output Frequency).

< Dimension and recommended land pattern >

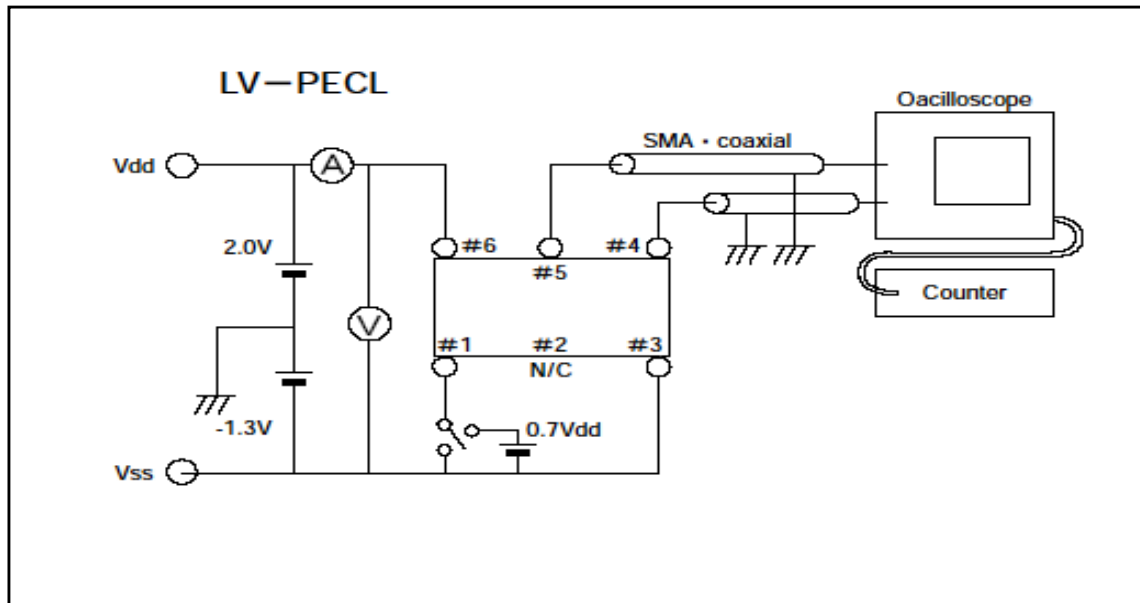
(Unit in mm)



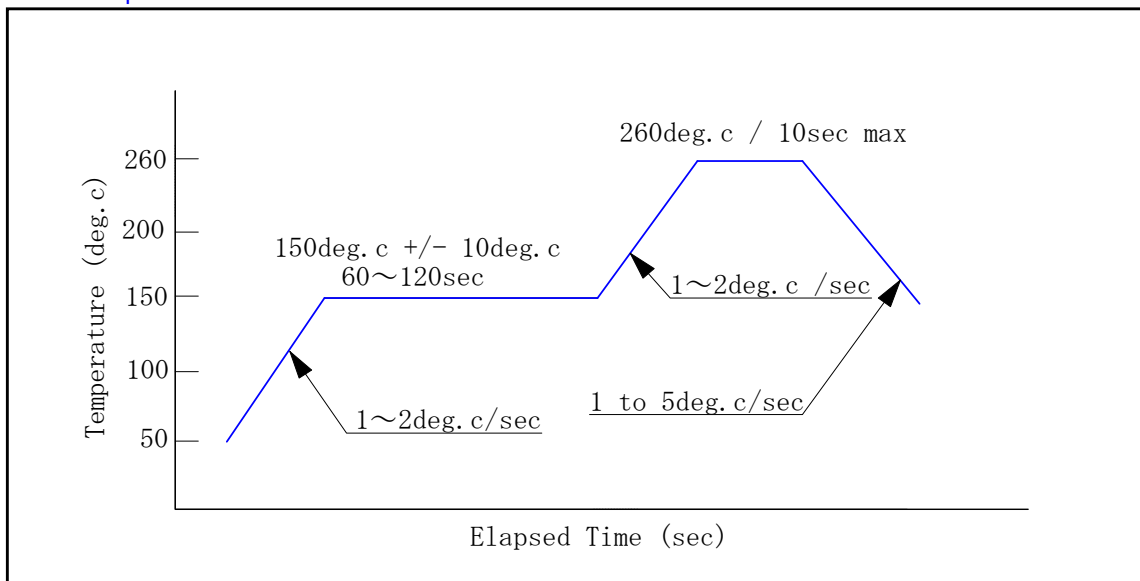
● Output Wave Form Diagram (Single output)



● Test circuits

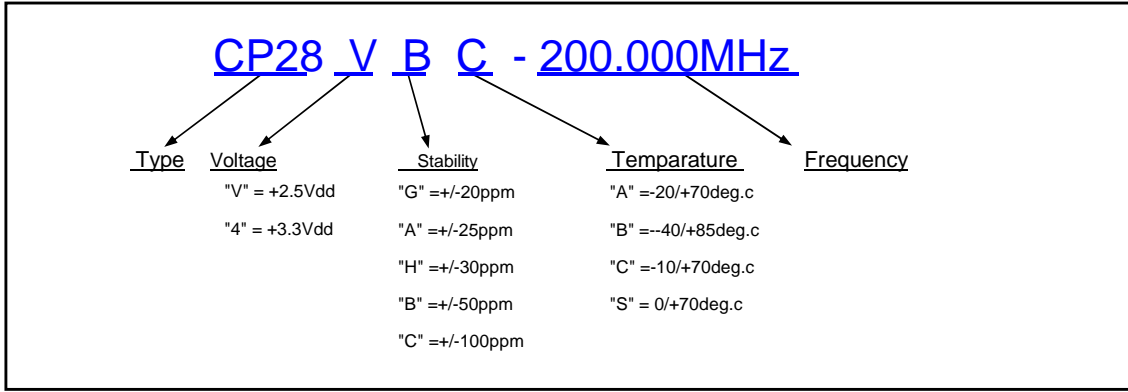


● Reflow profile

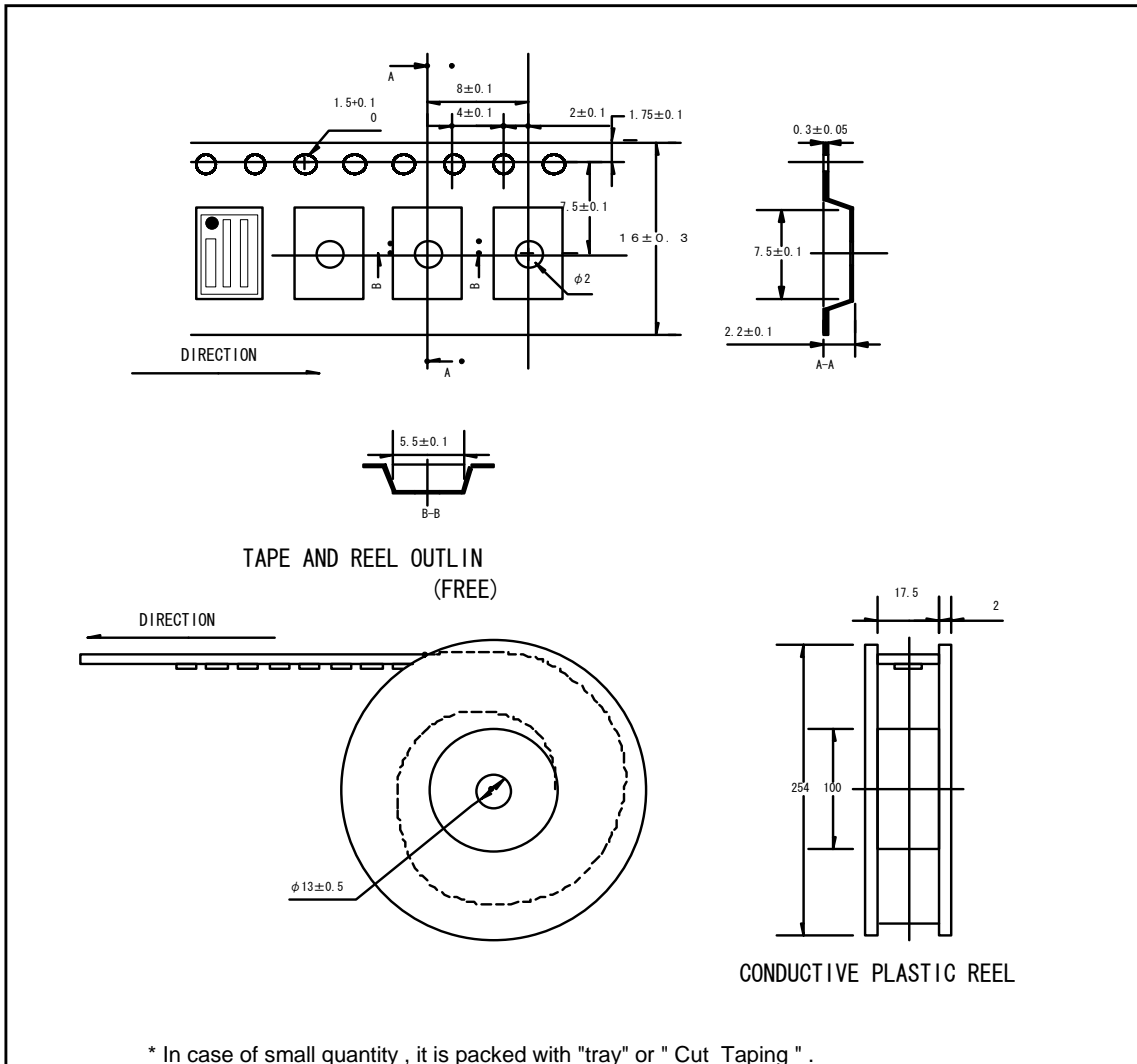


- * The reflow process can be allowed until 2 times.
- * In case of manual soldering ; using soldering iron at +360deg.c +/-20deg.c , within 3sec (per each 1pad)
- * This product includes CMOS device, then please handle it with protected process against ESD.

● How to define Model Number



● Taping & Reel dimension



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