

产品规格书

Product Specification

CUSTOMER 客户: _____

CUSTOMER PN 客户 PN: _____

HANG CRYSTAL P/N 杭晶物料编码: 5725H7-10.000Z33DTNOL

MODEL 产品型号: OCXO 25x22, SMD 7PAD, CMOS, 3.3V

NOMINAL FREQUENCY 频率: 10.000MHz

ISSUE DATE 日期: 2023 / 05 / 26

CUSTOMER'S APPROVAL

客户确认

(PLEASE RETURN A COPY WITH APPROVAL)
(请将确认的复印件返回我司)

APPROVED

QA

MB.

J Jiang

SUZHOU HANGJING ELEC&TECH CO., LTD

苏州杭晶电子科技有限公司

No. 207, Blk. B, Chenlei Science &
Technology Park, No. 1, First Qunxing Road,
Suzhou Industrial Park, Jiangsu, China
TEL 86 (0)512 65916689
FAX 86 (0)512 65918005

Revision	Description / ECN	Prepared	Approved	Date
1	Initial release	MB	James Jiang	2023-05-26
2	Not issued			
3	Not issued			
4	Not issued			

1. NOMINAL AND MAXIMUM RATINGS, OPERATING AND STORAGE CONDITIONS

	PARAMETER	SYMB.	MIN	TYP	MAX	Unit	Conditions / Remarks
1	Nominal frequency	F_N	10.000			MHz	--
2	Operating supply voltage range	V_{CC}	3.135	3.30	3.465	V_{DC}	
3	Output load	R_L		15		pF	CMOS Level
4	Operating temperature range	T_{OP}	-40	+25	+85	°C	Note 1
5	Storage Temperature Range	T_{ST}	-55		+90	°C	--

Note 1: over the whole range, the unit stays within all relevant parameter limits as specified under point 2.

2. ELECTRICAL PARAMETER LIMITS

	PARAMETER	SYMB.	MIN	TYP	MAX	Unit	Conditions / Remarks
1	Initial Frequency Accuracy	$\Delta f/F_N$	-500		+500	ppb	Offset from nominal at +25°C
2	Frequency stability over T_{OP}	$\Delta f/F_{OP}$	-1		+1	ppb	Over T_{OP} Note 1
3	Short Term Stability (in still air)				0.01	ppb/s	Max, after power on 1h
4	Warm-up Time				3.0	min	Within ± 100 ppb of final frequency with reference after 1 hour on@+25°C
5	Frequency VS voltage changes	$\Delta f/F_V$	-0.5		+0.5	ppb	$V_{CC} \pm 5\%$ at +25°C
6	Frequency VS load changes	$\Delta f/F_L$	-0.5		+0.5	ppb	$CL \pm 10\%$ at +25°C
7	Aging per day	$\Delta f/F_{Ad}$	-0.3		+0.3	ppb	Aging after 30 days of operation
8	Aging first year	$\Delta f/F_{A1}$	-50		+50	ppb	
9	Aging 10 years	$\Delta f/F_{A10}$	-0.2		+0.2	ppm	
10	Output voltage level HIGH	V_{OH}	2.4			V_{DC}	
11	Output voltage level LOW	V_{OL}			0.4	V_{DC}	
12	Output amplitude rise/fall time	$t_r t_f$			5.0	ns	15pF / +25°C
13	Output amplitude symmetry	DC	45		55	%	15pF / +25°C
14	Phase noise	L_{RMS}			-95	dBc/Hz	at 1Hz offset / at +25°C
					-125		at 10Hz offset / at +25°C
					-140		at 100Hz offset / at +25°C
					-150		at 1kHz offset / at +25°C
					-150		at 10kHz offset / at +25°C
					-150		at 100kHz offset / at +25°C
15	Operating Current	I_{CC}			1000	mA	During warm up
					400	mA	At steady state, @25°C
16	Control Voltage Range	V_C				V_{DC}	NA
17	Frequency tuning range	F_{PULL}					NA

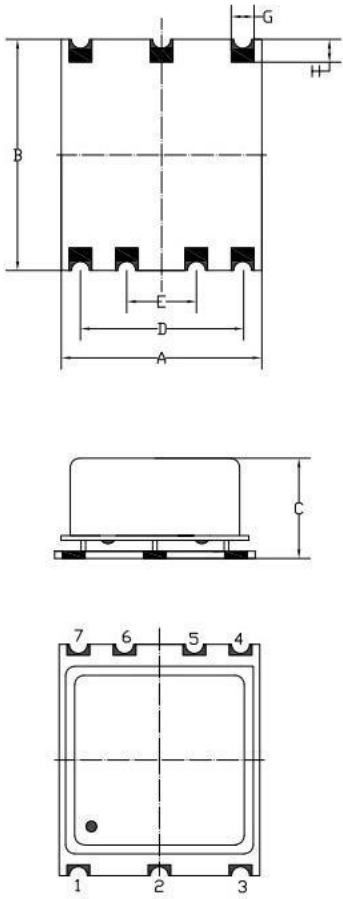
Note 1: Frequency stability is the frequency deviation over operating temperature range T_{OP} in reference to the frequency reading at +25°C.

3. PRODUCT MARKING

To be defined.

4. OUTLINE DRAWING

	Package description	Package model	Remarks
1	25x22 SMD type with 7 pads	2522-7P	--



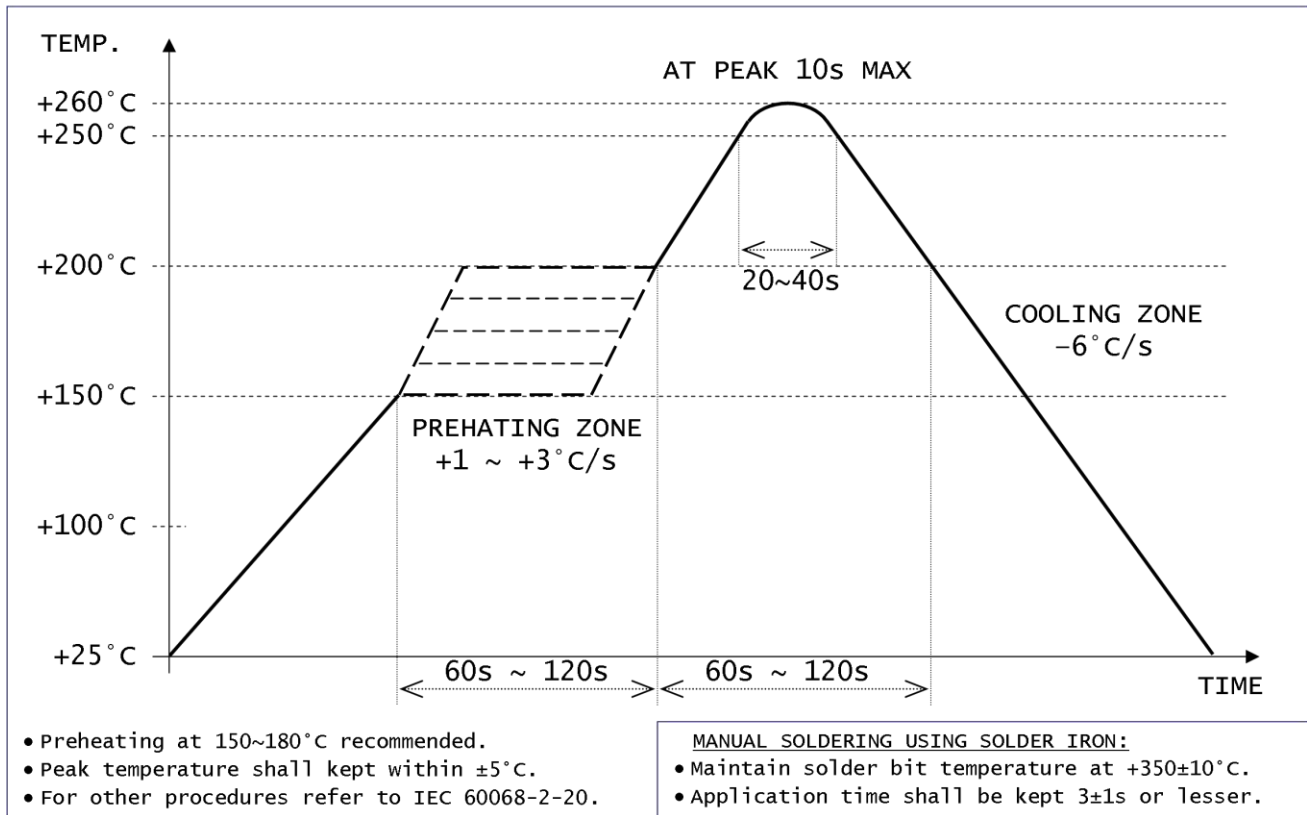
Pin Function:

Pin	Pin Function
1	NC
2	NC
3	Vcc
4	OUTPUT
5	NC
6	NC
7	GND

Symbol	Size (mm)	
	Min	Max
A	21.8	22.2
B	25.2	25.6
C		11.0
D	17.7	17.9
E	7.5	7.7
G	2.4	2.6
H	2.4	2.6

5. RECOMMENDED SOLDERING INFORMATION

RECOMMENDED REFLOW SOLDER PROFILE - PEAK TEMPERATURE UP TO +260°C



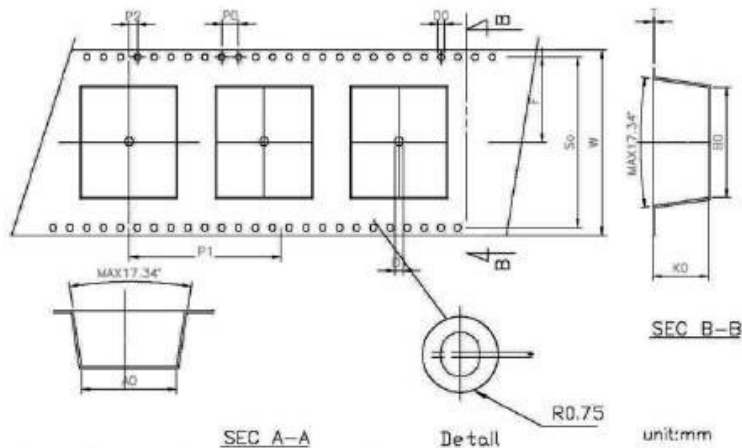
DWG_ReflowProfile_260

HCI QE 2014/10

NO SCALE

Rev.: 1

6. PACKAGING



symbol	A0	B0	K0	P0	P1	P2	T
Spec	22.5±0.10	26±0.10	13.2±0.10	4.0±0.10	32±0.10	2.0±0.10	0.50±0.10
symbol	E	F	D0	D1	W	10Po	K1
Spec	1.75±0.10	20.2±0.10	1.55±0.05	2.00(MIN)	44.0±0.30	40.0±0.20	
symbol	S0						
Spec	40.4±0.10						