

深圳市雅晶鑫电子有限公司

Shenzhen Yajingxin Electron Co.,Ltd

产品规格书

SPECIFICATION FOR PRODUCT

品 名
PARTNAME OSC SMD 2016

规 格
SPECIFICATION 24.000MHz / 1.62~3.63V

客 户
CUSTOMER

客户 料号
CUSTOMER P/N

雅晶鑫 料号
TONGJING P/N G201624MUBCE20

日 期
DATE 2024 年 08 月 19 日

编 号
NUMBER T2408300011

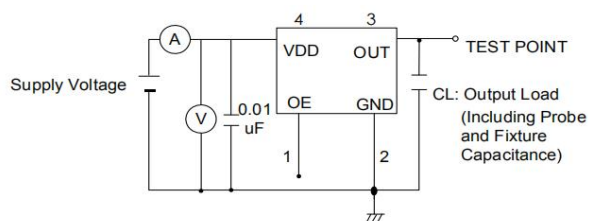
拟制: 陈昭昭 复核: 郑利 批准: 李虹

深圳市雅晶鑫电子有限公司

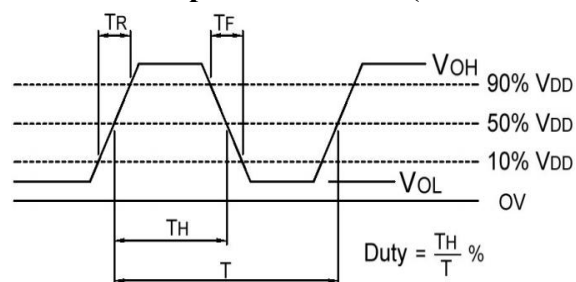
Shenzhen Yajingxin Electron Co.,Ltd

DESCRIPTION			CONTENTS
1	Holder Type	封装盒型	SMD 2016
2	Nominal Frequency	标称频率	24.000MHz
3	Frequency Tolerance @25℃ ±2℃	频率公差	±10ppm
4	Operable Temperature Range	工作温度	-40℃ ~ +85℃
5	Output Load	输出负载	15 pF
6	Supply Voltage	工作电压	1.62~3.63Vdc
7	Output Waveform	输出波形	CMOS
8	Current Comsuption	电流消耗	Operating 10mA
			Standby 10uA
9	Duty Cycle	占空比	50±10%
10	Output Rise/Fall Time	输出上升/下降时间	5ns
11	Output Level	输出电平	Output High (Logic “1”) 0.9Vdd MIN
			Output Low (Logic “0”) 0.1Vdd MAX
12	Enable Delay Time	使能延迟	150 uS MAX
13	Storage Temperature	储存温度	-55℃ ~ +125℃
14	Aging Rate	年老化率	±3ppm/Year
15	Start-up Time	启动时间	5ms

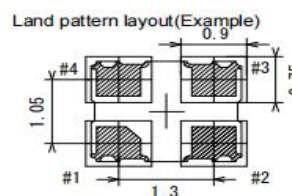
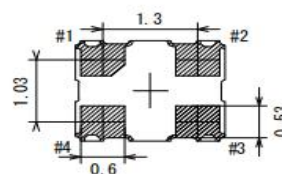
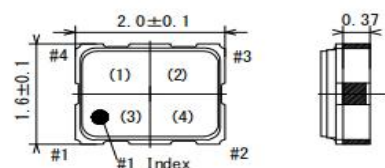
● Test Circuit (CMOS Load)



● Output Waveform (CMOS Load)



● Outline Dimensions(unit: mm)



unit: mm

Dimensional Tolerance: $\pm$ 0.1

(Unless otherwise noted)

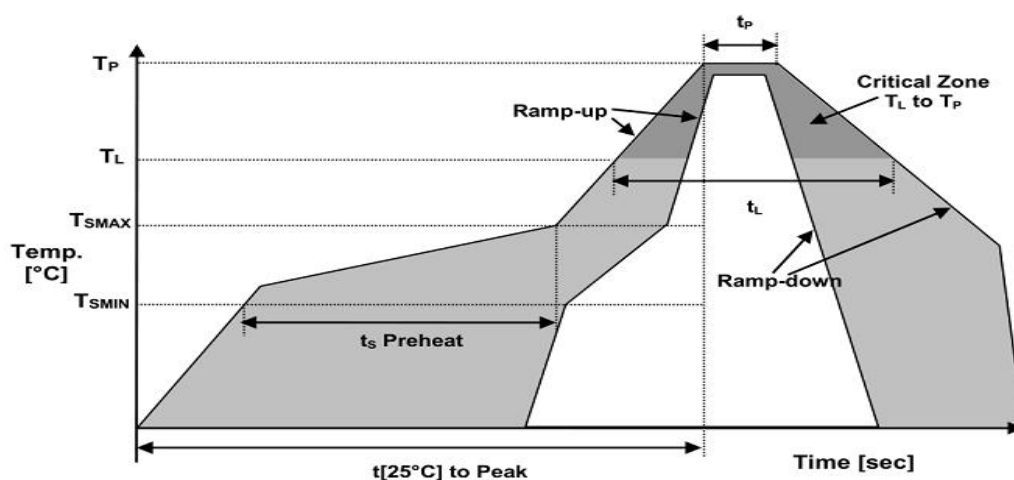
Pin Connection

Name	Connection
1	E/D
2	GND
3	Fout
4	Vdd

Function

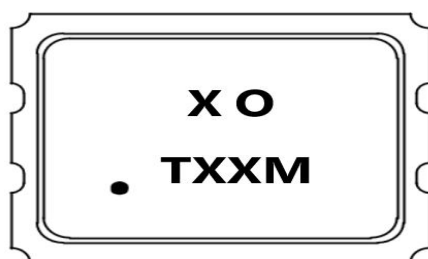
Pin1 Input	Pin3 Output
High level	Oscillation
Low level	Oscillation stop

● Reflow soldering



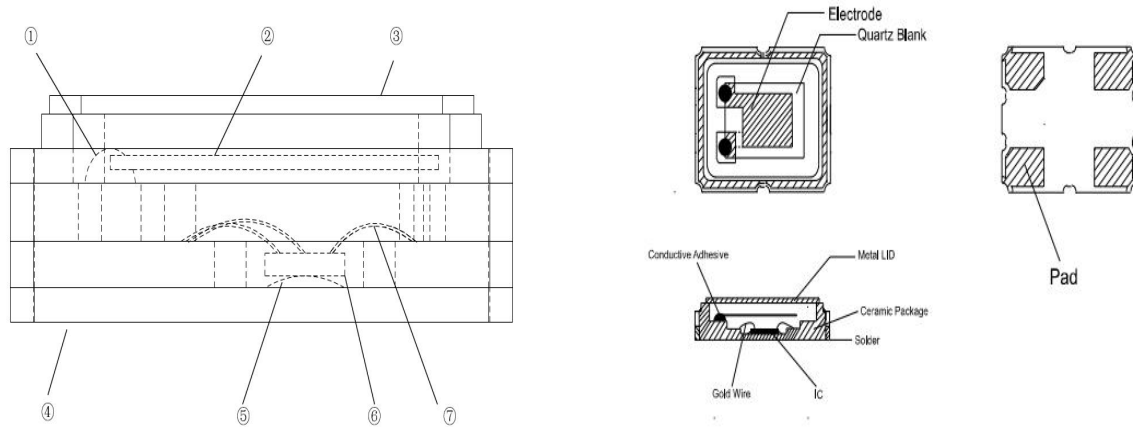
Reflow Profile		
Temperature MIN Preheat	T _{SMIN}	150°C
Temperature MAX Preheat	T _{SMAX}	200°C
Time (T _{SMIN} - T _{SMAX})	t _s	60-180sec
Temperature	T _L	217°C
Peak Temperature	T _P	260°C
Ramp-up Rate	R _{UP}	3°C/sec max
Ramp-Down Rate	R _{DOWN}	6°C/sec max
Time within 5°C of Peak Temperature	t _P	10sec
Time t(25°C) to Peak Temperature	t(25°C)to Peak	480sec
Time	t _L	60-150sec

● Marking



XO: Oscillator Code
 T: TJ Logo
 XX: Frequency Code
 M: Frequency Units
 ●: Pin1 Index

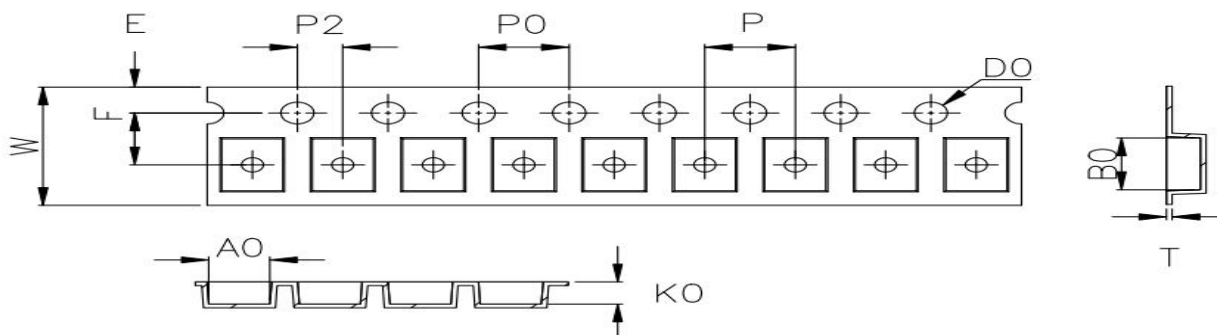
● Structure Illustration



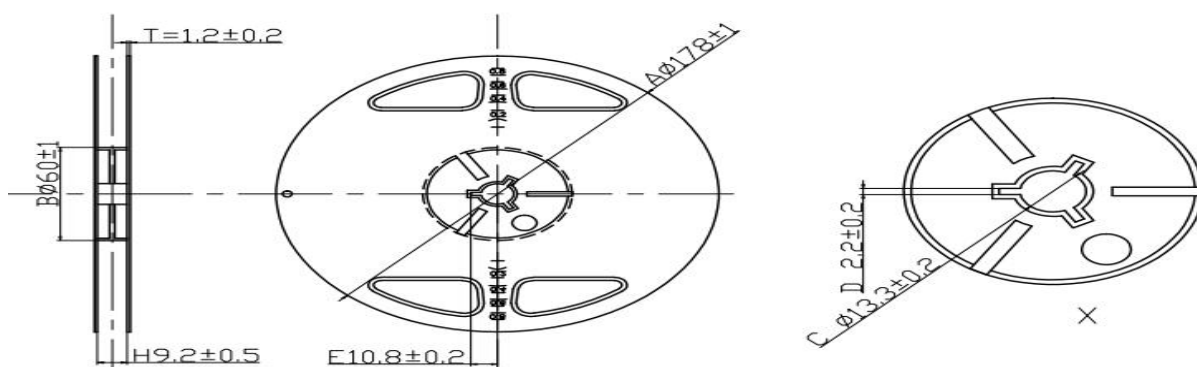
NO.	Components	Materials
1	Conductive Adhesive	Ag+Silicone resin
2	Crystal Blank	SiO ₂
3	Lid	Fe-Ni-Co Alloy
4	Base	Ceramic+Noble Metal
5	Conductive Adhesive of Solid IC	Ag+Silicone resin
6	IC	Si
7	Gold wire	Au

● Package

Tape Dimensions(unit :mm)



W	8.00 ± 0.30	P	4.00 ± 0.05	A0	1.90 ± 0.05
E	1.75 ± 0.05	P0	4.00 ± 0.05	K0	0.65 ± 0.05
F	3.50 ± 0.05	P2	2.00 ± 0.05	B0	2.30 ± 0.05
T	0.25 ± 0.03	D0	$1.55 + 0.10 / - 0$		

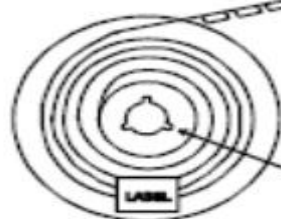


Begin



3000pcs-product Tape

Start



End

Close

