

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 SMD XO 2016

规 格

SPECIFICATION 12.000MHz

客 户

CUSTOMER

客户 料号

CUSTOMER P/N

雅晶鑫 料号

Y J X P/N TE12MUBCE2O

日 期

DATE 2025 年 8 月 18 日

编 号

NUMBER T202508180002

拟制:



复核:



批准:

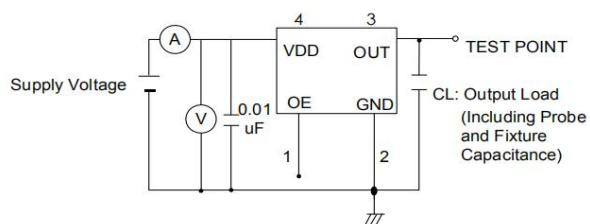


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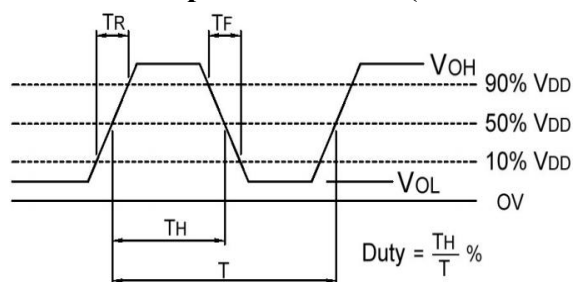
Shenzhen Yajingxin Electron Co.,Ltd

DESCRIPTION			CONTENTS
1	Holder Type	封装盒型	SMD X0 2016
2	Nominal Frequency	标称频率	12.000MHz
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

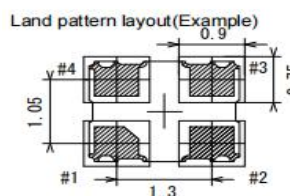
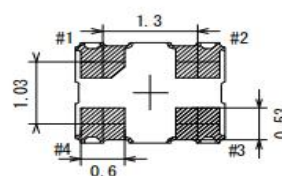
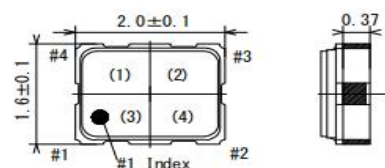
● Test Circuit (CMOS Load)



● Output Waveform (CMOS Load)



● Outline Dimensions(unit: mm)



unit: mm

Dimensional Tolerance: ± 0.1

(Unless otherwise noted)

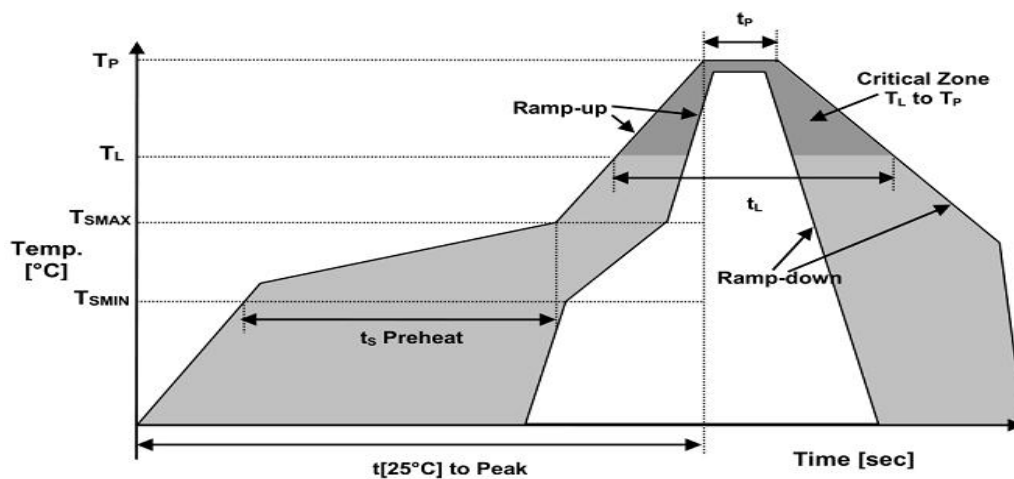
Pin Connection

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

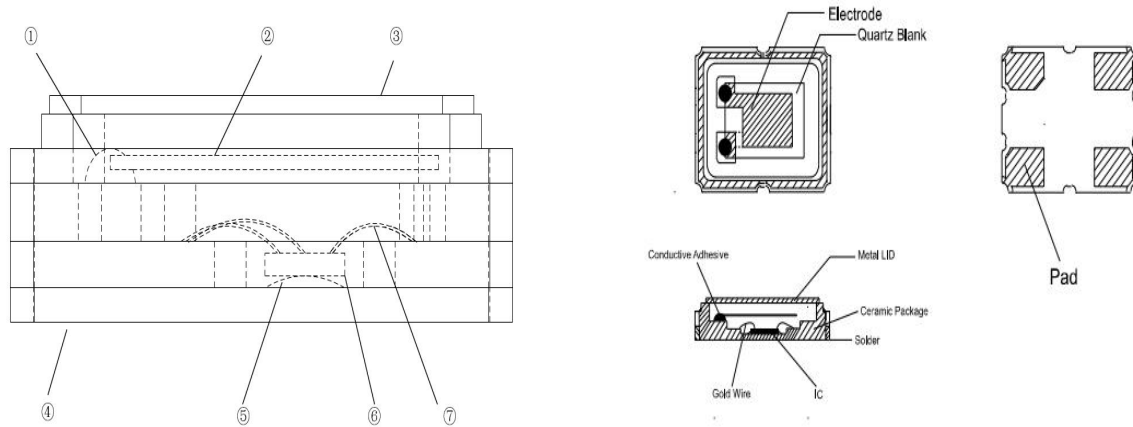


Reflow Profile		
Temperature MIN Preheat	T_{SMIN}	150°C
Temperature MAX Preheat	T_{SMAX}	200°C
Time ($T_{SMIN} - T_{SMAX}$)	t_s	60-180sec
Temperature	T_L	217°C
Peak Temperature	T_P	260°C
Ramp-up Rate	R_{UP}	3°C/sec max
Ramp-Down Rate	R_{DOWN}	6°C/sec max
Time within 5°C of Peak Temperature	t_p	10sec
Time $t(25^{\circ}C)$ to Peak Temperature	$t(25^{\circ}C) \text{ to Peak}$	480sec
Time	t_L	60-150sec

● Marking



● 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