

RoHS Compliant

APPROVAL SHEET

Issued No. : _____

DESCRIPTION : SMD 5032 FASTXO CMOS OUTPUT

NOMINAL FREQ. : 4.915200 MHz

TAITIEN P/N : 11345-L-356-3

TAITIEN MODEL : PVEUDLJANF-4.915200MHz

REVISION : 1

DATE : 7/11/2025

Approval	Checked by	Prepared by
张帆	李成军	孙鹏

CUSTOMER : 北京强云创新

CUSTOMER P/N : _____

Customer Signature
Approved:
Date:

REVISION HISTORY

Rev.	Revised Page	Revision Content	Date	Ref. No.	Reviser
01	N/A	Initial Released	11/11/2024	N/A	Y.P.MA

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ELECTRICAL CHARACTERISTICS

FREQUENCY

	Parameter	Min.	Typ.	Max.	Units	Remarks
1-1	Nominal Frequency	4.915200			MHz	
1-2	Frequency stability (Overall)	-25		+25	ppm	Frequency stability includes frequency tolerance@25°C and frequency stability vs. operating temperature range and voltage variance.
1-3	Aging	-3		+3	ppm	Frequency drift in first year @ 25°C
1-4	Operating Temperature range	-40		+85	°C	The operating temperature range over which the frequency stability is measured.
1-5	Storage Temperature range	-55		+125	°C	

POWER SUPPLY

	Parameter	Min.	Typ.	Max.	Units	Remarks
2-1	Supply voltage	3.135	3.3	3.465	V	
2-2	Current			27	mA	At maximum supply voltage
2-3	Power Supply Ramp	0.01		500	mSec	Time for V _{DD} to reach 90%V _{DD} Power ramp must be monotonic.
2-4	Standby current			400	uA	OE pin Low and disable frequency output

INPUT

	Parameter	Min.	Typ.	Max.	Units	Remarks
3-1	OE	0.7V _{DD}			V	High or floating(*Note1): Enable frequency output
3-2	(Tri-State) Output disable and High-Impedance			0.3V _{DD}	V	Low: Disable frequency output

*Note 1 : A pull-up resistor of <30k Ω between the OE pin and V_{DD} is recommended in a high noise environment.

OUTPUT

	Parameter	Min.	Typ.	Max.	Units	Remarks
4-1	Output waveform	CMOS				
4-2	Duty Cycle	45	50	55	%	
4-3	Start Time			8	mSec	
4-4	Transition Time : Rise/Fall Time			3	nSec	
4-5	Output	Output High(Logic "1")	90% V _{DD}		V	
4-6	Level	Output Low(Logic "0")		10%V _{DD}	V	
4-7	Output Load			15pF		

➤ JITTER

	Parameter	Min.	Typ.	Max.	Units	Remarks
5-1	RMS Phase Jitter				pSec	
5-2	Period Jitter (Pk-Pk)				pSec	
5-3	Period Jitter (RMS)				pSec	

➤ PHASE NOISE

	Parameter	Min.	Typ.	Max.	Units	Remarks
5-1	Hz offset				dBc/Hz	
5-2	Hz offset				dBc/Hz	
5-3	Hz offset				dBc/Hz	
5-4	Hz offset				dBc/Hz	
5-5	Hz offset				dBc/Hz	
5-6	Hz offset				dBc/Hz	

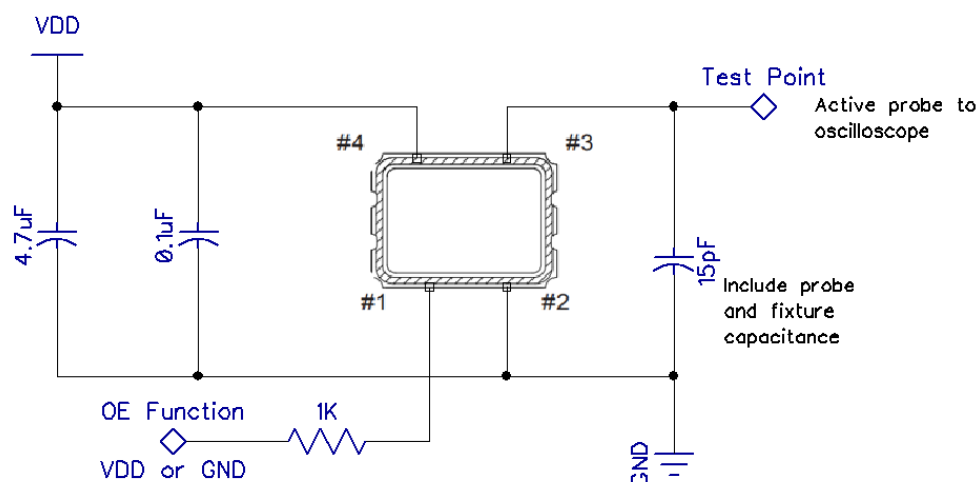
■ CUSTOMER SPECIAL REQUIREMENT

6-1	
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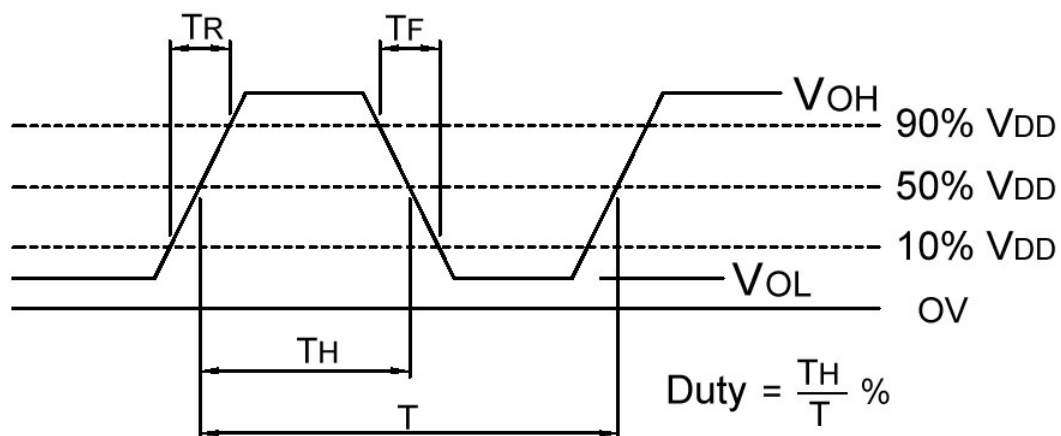
■ ENVIRONMENTAL & RELIABILITY SPECIFICATIONS

	Parameter	Reference Std.	Remarks
7-1	Thermal Shock	MIL-STD-883H 1010.8 Condition B	-55°C , 125°C ; soak time is 10 mins, with total 200 cycles
7-2	Damp Heat	JESD22-A101	85°C/85% RH for 500 hrs
7-3	Low Temp Storage	IEC 60068-2-1	-55°C for 500 hrs
7-4	Drop Test	IEC 60068-2-32	70, 80, 100cm,each height for 3 times on hardboard
7-5	Mech Shock	MIL-STD-883H 2002.5 Condition B	1500g, half-sine, 0.5ms, each axis for 3 times.
7-6	Vibration Test	MIL-STD-883H 2007.3 Condition A	10~2000Hz, 1.52mm, 20g, each axis for 4 hrs

■ TEST CIRCUIT (CMOS LOAD)



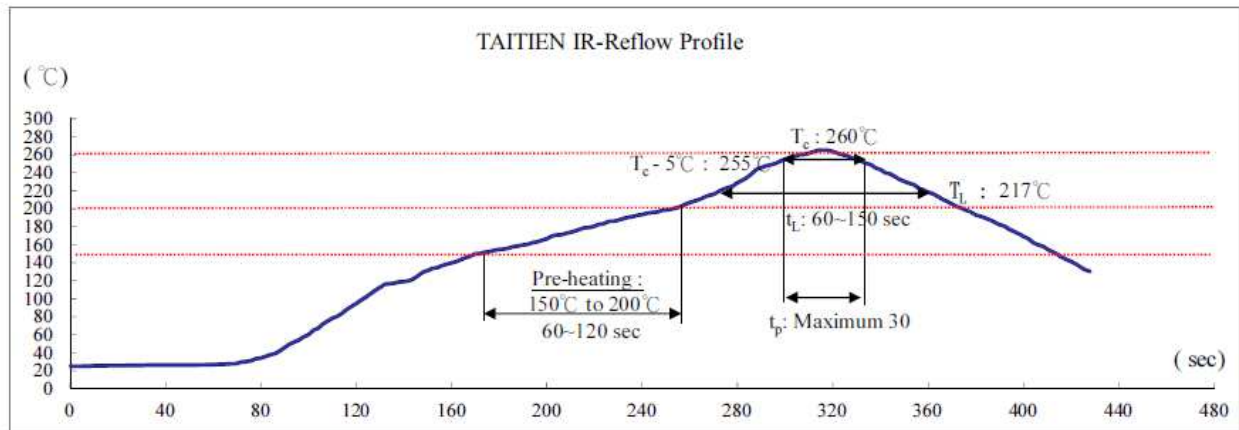
■ OUTPUT WAVEFORM (CMOS LOAD)



■ RECOMMENDED IR REFLOW PROFILE

➤ IR REFLOW PROFILE OF CERAMIC SMD PRODUCTS FOR Pb FREE PROCESS

TAITIEN ELECTRONICS CO., LTD.



Reference Standard: JEDEC-STD 020

Test conditions: Pre-heating : 150°C to 200°C, 60~120secs.

Liquidous temperature (T_L) & Time (t_L): Heating : 217°C, 60~150sec.

T_c is 260 °C and time t_p is 30 seconds,

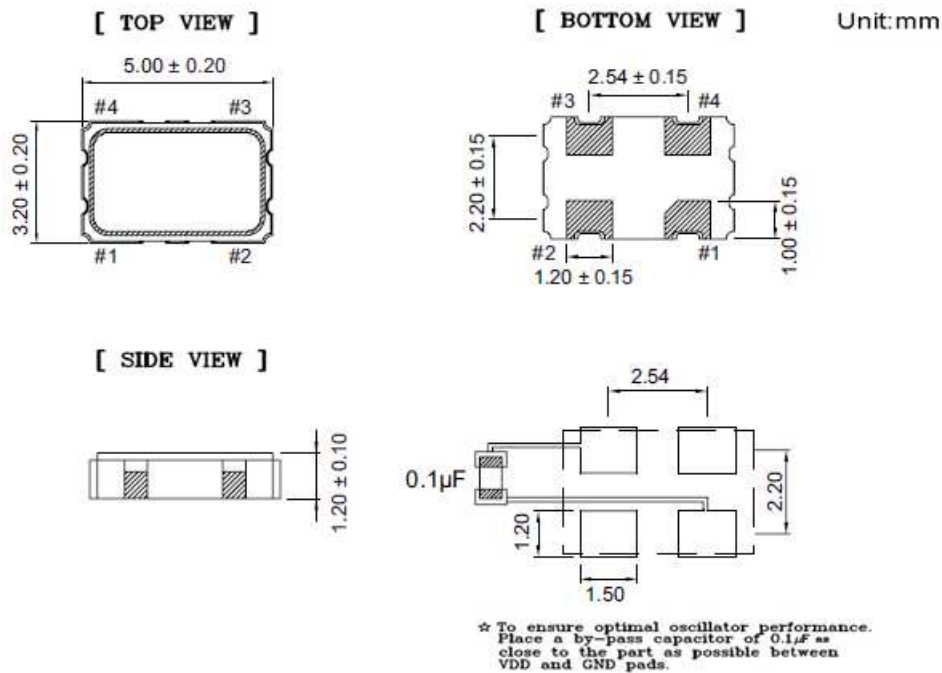
T_c : classification temperature ; the maximum body temperature at which the component manufacturer guarantees the component MSL as noted on the caution and/or bar code label per J-STD-033.

t_p : time within 5 °C of the specified classification temperature (T_c).

**The peak temperature must not exceed 260 °C. The time t_p above 255 °C must not exceed (Max.) 30 seconds.

■ PRODUCT DIMENSIONS

➤ DIMENSIONS

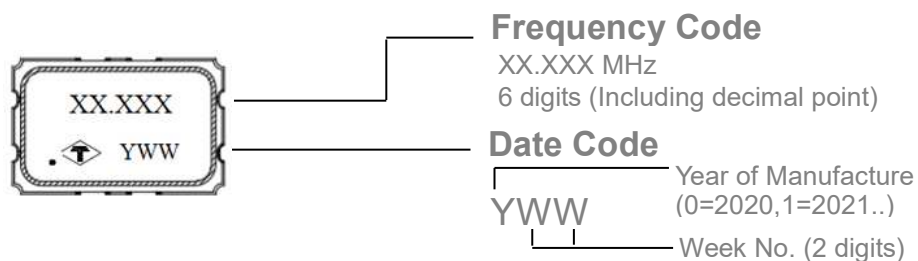


➤ PIN FUNCTIONS

NO	Name	Type	Function and Remarks
1	OE (Tri-state)	Input	Output control pin. Reference as below table
			Input level
			Oscillation
			Outputs
2	GND	Power-	GND pin
3	OUT	Output	Frequency output
4	V _{DD}	Power+	Power Supply, V _{DD} pin

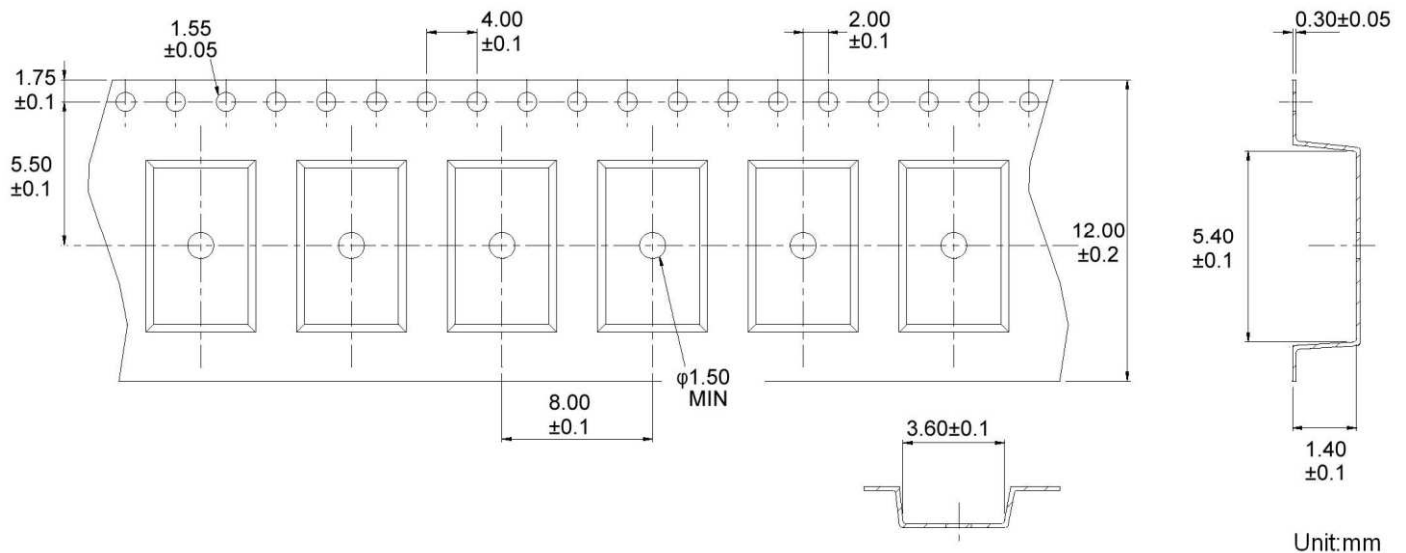
■ PRODUCT IDENTIFICATION (MARKING)

➤ PROCEDURE : LASER

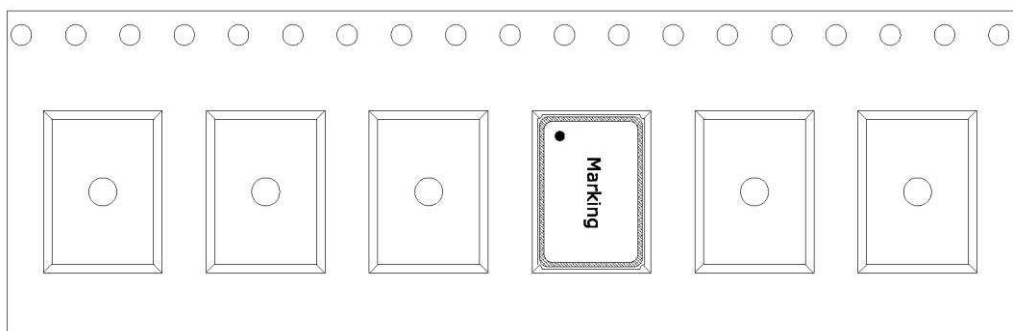


■ PACKAGE INFORMATION

➤ TAPE (CARRIER) DIMENSIONS



➤ THE DIRECTION OF PACKING



➤ REEL DIMENSIONS

