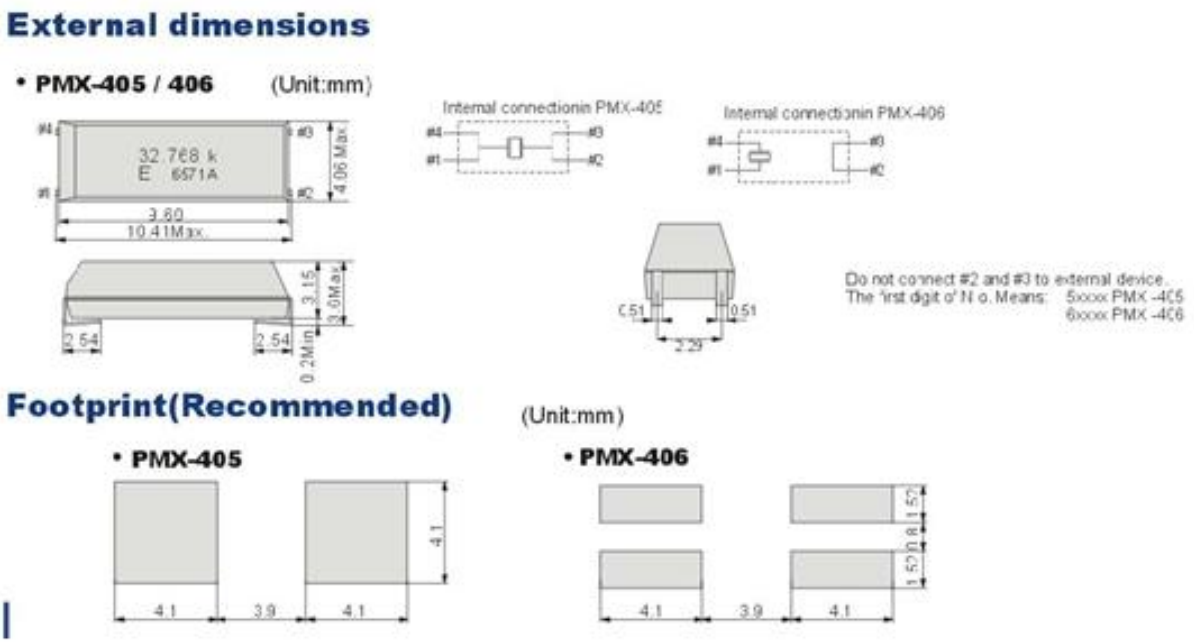
1. QUARTZ CRYSTAL UNIT SPECIFICATION

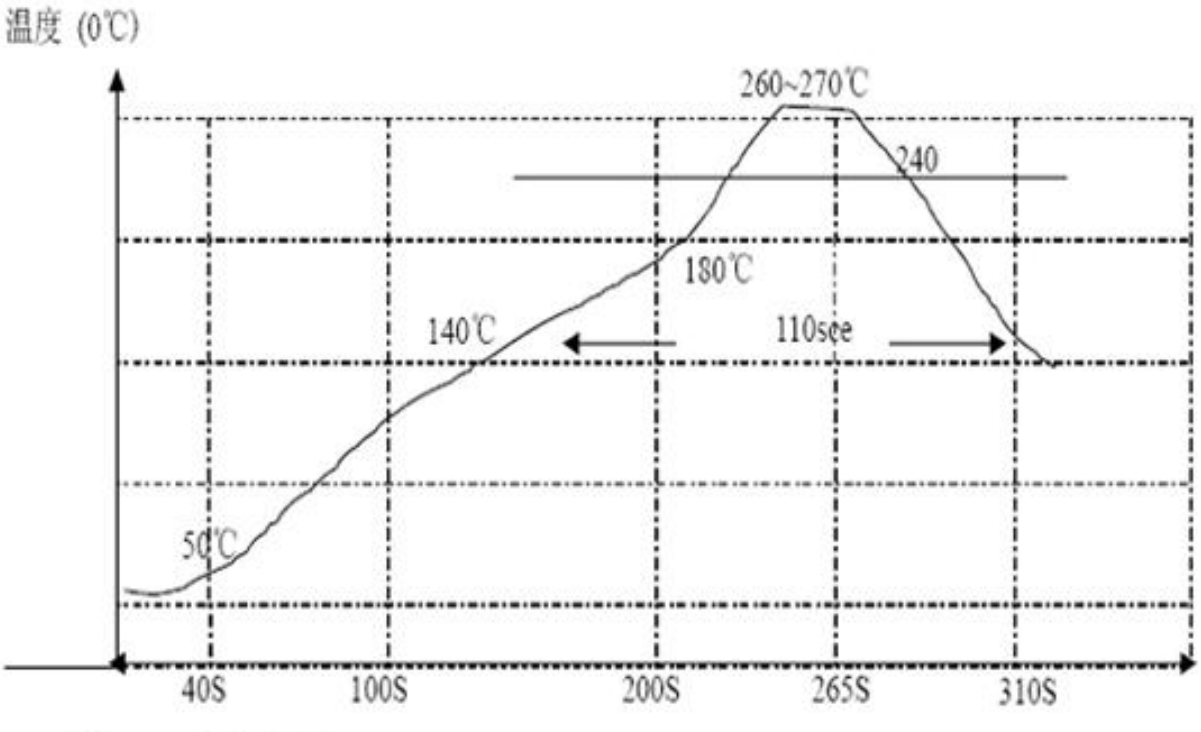
Item	Symbol	Specifications				Remark
		Min	Type	Max	Units	
1. Production type		Quartz Crystal Resonator				
2. Holder		WTL4W10336				
3. Mode of oscillation		■ Fundamental	□ 3 Overtone		□ 5 Overtone	
4. Frequency	FL		16.000		MHz	
5. Load capacitance	CL		12.5		pF	
6. Frequency tolerance	Tol		±20		ppm	at 25℃ ± 3℃
7. Equivalent resistance	Rs		80		Ω	Max.
8. Working temperature range	TR		-40 ~ 85		℃	
9. Freq. Temp. Characteristics	TC		± 30		ppm	working temperature ΔF
10. Drive level	DL		100		μW	Max.
11. Shunt Capacitance	C0		5		pF	Max.
12. Storage temperature range			-40 ~ 85		℃	
13. Insulation resistance			500		MΩ	Min.
14. Measure Circuit			S&A 250B			π network
15. Aging			5		ppm/Yr	Max.

※ This product doesn't include harmful substance that stipulated by RoHS

1.2 DIMENSION Unit:mm



1.3 Reflow



2. TEST STANDARD

2.1 GENERAL ELECTRICAL CHARACTERISTICS AND VISUAL TESTING

2.1.1 LOT CLASSIFICATION : If the quantity is 1,000 pcs or more, 1,000 pcs is one lot.

2.1.2 SAMPLING TEST METHOD : MIL-STD-105E G-II

2.1.3 TEST LEVEL

A] HIGH LEVEL DEFECT : AQL 0.065% [200 PCS]

B] MEDIUM LEVEL DEFECT : AQL 0.25% [50 PCS]

C] LOW LEVEL DEFECT : AQL 0.4% [32 PCS]

2.1.4 DEFECT CLASSIFICATION

A] HIGH LEVEL

@NO FREQUENCY

@MIXING

@LEAK DEFECT

B] MEDIUM LEVEL - ELECTRICAL CHARACTERISTIC DEFECT

@FREQUENCY

@OSCILLATION

@ELECTRICAL CURRENT

@OTHER ELECTRICAL CHARACTERISTICS DEFECT

C] VISUAL

@MARKING

@WELDING

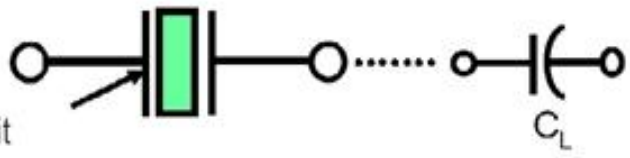
@LEADS

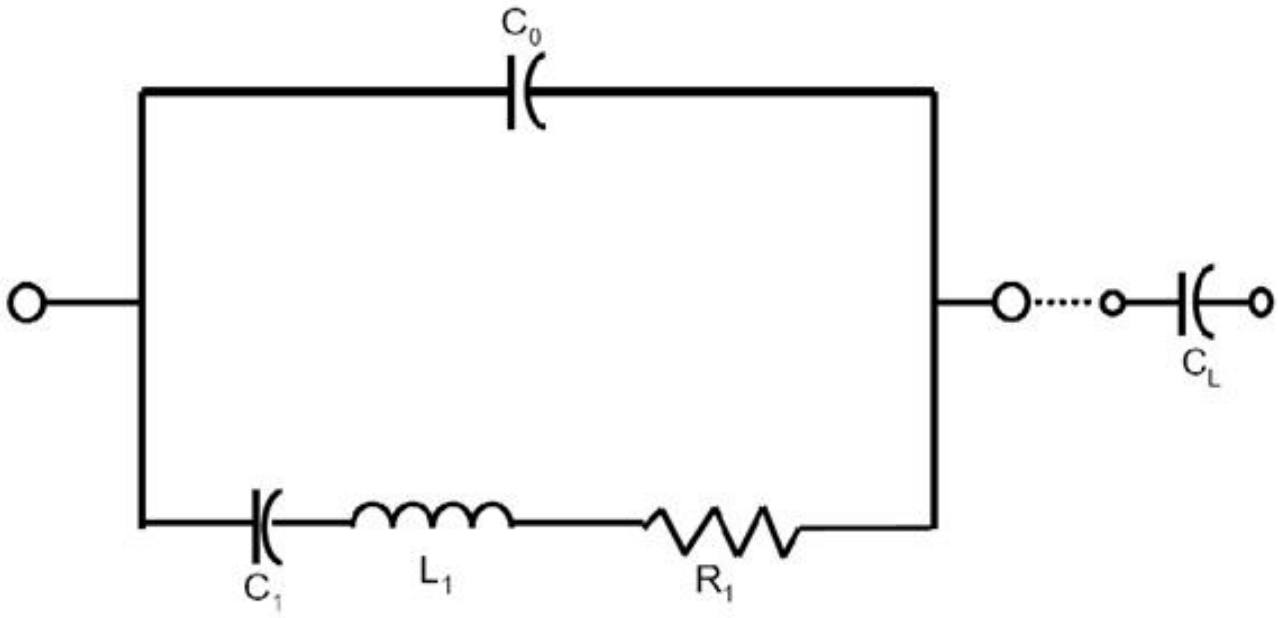
@OTHER VISUAL DEFECT

TESTING METHOD AND ITS STANDARD CAN BE MODIFIED DEPENDING ON THE CUSTOMER'S REQUEST.

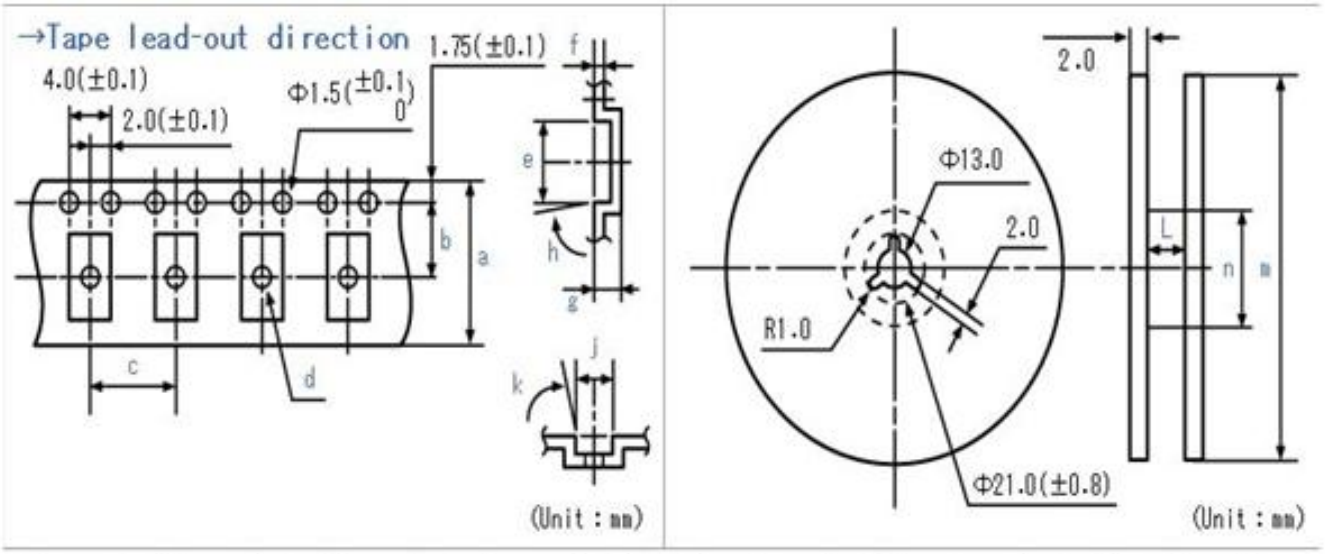
2.2 EQUIVALENT CIRCUITS

Symbol for crystal unit





4. Packing



Quantity (pcs / reel)	a	b	c	d (Φ)	e	f	g	h (Max.)	j	k (Max.)	L	m (Φ)	n (Φ)
1,000	24.0	11.5	12.0	2.2	12.8	0.4	3.9	3°	4.8	3°	25.5	330	100

4.2 PACKAGING METHOD

4.2.1 TAPE & REEL AS SHOWN IN ABOVE DIMENSION,

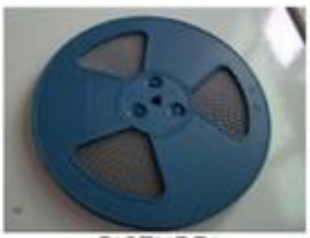
4.2.2 INSERT 1,000 PCS OF TAPE & REEL COVERED WITH SHOCK ABSORBANT PAD INTO THE INNER BOX(INNER BOX SHOULD HAVE DESCRIPTION OF THE PART CONTAINED) AS SHOWN IN PICTURE1.

INNER-BOX CAN ACCOMODATE UPTO 1,000PCS.[PICTURE2]

4.2.3 INSERT SHOCK-ABSORBANT PAD ON ALL SIDES(INCLUDING TOP), AND THEN INSERT UPTO 5 INNER BOXES INTO THE OUTER BOX. [PICTURE3]

4.2.4 ON THE INNER-BOX COVER, LABEL CONTENTS OF THE BOX(FREQUENCY, LOAD CAPACITANCE, AND QUANTITY).

4.2.5 TO PREVENT INNER-BOX COVER OPENING DUE TO SHOCK, FASTEN THE COVER WITH A CLEAR TAPE AS SHOWN IN PICTURE4.


PICTURE1


PICTURE2


PICTURE3


PICTURE4