

WT-203P

P 1/4

CRYSTAL SPECIFICATIONS

CUSTOMER'S NAME : 精格 (SEKAKU)

SIWARD CODE : 10110192900000

SPEC. NO : K55-007

CUSTOMER'S CODE :

DATE : 1. 27. 1995

1. GENERAL

- 1-1 HOLDER STYLE : UM-1.25 (SXD - 00001)
 1-2 OSCILLATION MODE : FUNDAMENTAL
 1-3 NOMINAL FREQUENCY : 19.296000 MHz
 1-3-1 CRYSTAL FREQUENCY : 19.296000 MHz
 1-4 FREQUENCY TOLERANCE
 1-4-1 TOLERANCE OF CENTER FREQUENCY : $\pm$ 20 PPM AT $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$.
 1-4-2 CENTER FREQUENCY DRIFT : $\pm$ 20 PPM IN 1-S.
 1-5 OPERATING TEMPERATURE RANGE : -10°C TO $+60^{\circ}\text{C}$.
 1-6 STORAGE TEMPERATURE RANGE : -20°C TO $+70^{\circ}\text{C}$.

2. CIRCUIT

- 2-1 CIRCUIT : MEASURED IN S & A 350A.
 2-2 LOAD CAPACITANCE : 30 PF $\pm$ 0.2 PF.
 2-3 DRIVE LEVEL : 500 μW MAX.

3. ELECTRICAL DATA

- 3-1 EQUIVALENT RESISTANCE : LESS THAN 25 OHM. (SERIES)
 3-2 MOTIONAL CAPACITANCE C1 :
 3-3 MOTIONAL INDUCTANCE L1 :
 3-4 UNWANTED MODES :
 3-5 ELECTROSTATIC CAPACITANCE: 7.00 PF MAX.
 3-6 TRIM SENSITIVITY OF LOAD :
 3-7 FREQUENCY VARIABLE :
 OF LOAD CHANGE (PULLING)
 3-8 INSULATION RESISTANCE : MORE THAN 500 MEG OHM AT DC 100 VOLT.
 3-9 AGING : LESS THAN $\pm$ 5 PPM/YEAR.

4. MECHANICAL DATA

- 4-1 SHOCKING TEST : DROPPING FROM 20 cm HEIGHT 3 TIMES ON FIRM WOOD.
 AFTER SHOCKING TEST ITEM 1-4-1 & 3-1 TO BE SATISFIED.
 4-2 VIBRATION TEST: THE UNITS SHALL BE CAPABLE OF WITHSTANDING EACH 2
 HOUR IN 3 DIRECTIONS 10 ~ 55 Hz AMPLETUDE 1.5 mm P-P.
 AFTER VIBRATION TEST ITEM 1-4-1 & 3-1 TO BE SATISFIED.
 4-3 SEALING TEST : WITHOUT REPETITIVE BUBBLES EMERGING FROM THE QUARTZ
 CRYSTAL UNIT WHILE IT IS IMMERSSED IN WATER AT A
 TEMPERATURE WITHIN $90^{\circ}\text{C} \sim 95^{\circ}\text{C}$ AFTER 5 MINUTES.

5. MARKING : SEE THE REMARKS OR REFER TO THE ATTACHED SHEET.

6. PACKING STYLE : UNDER OUR METHOD. (TP - 005)

REMARKS.

= YEAR $\rightarrow$ 95 (1995) MONTH $\rightarrow$ A
 MONTH : 1 2 3 4 5 6 7 8 9 10 11 12
 CODE : A B C D E F G H J K L M
 USE A BOX PER FREQUENCY.

SEKAKU ELECTRON INDUSTRY CO.,
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 EXHIBIT #: 7A

MARKING STYLE

19.296
 95-A

SIWARD

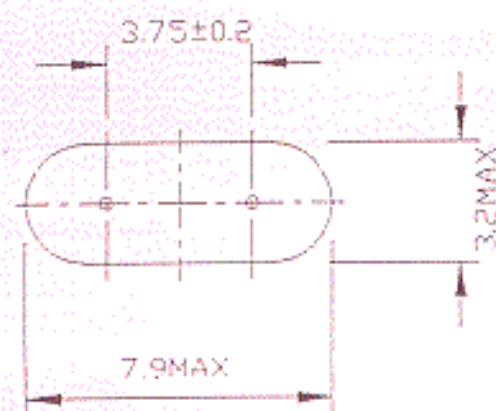
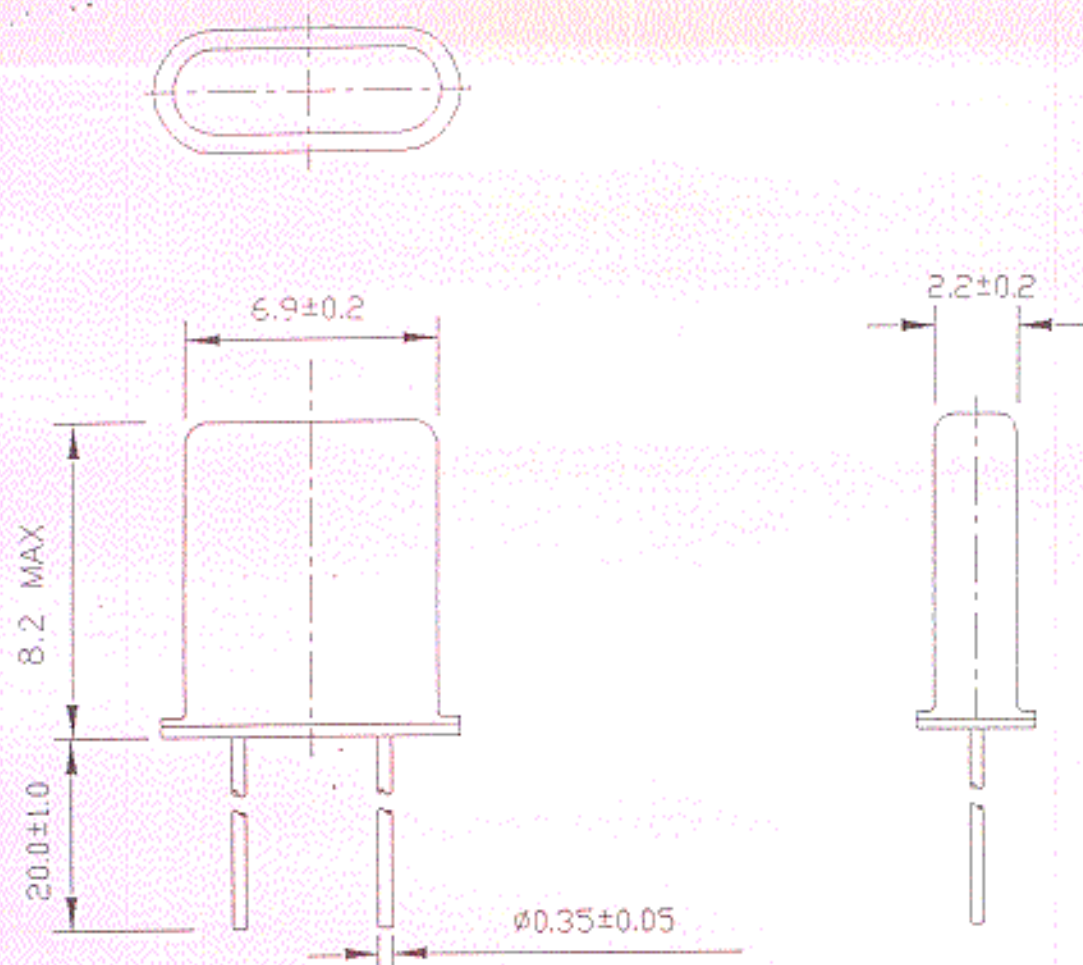
PROVE

CLERK

174
TJ MD 2K
MARKING
X-TAL F.

18.0408 MHz	16.9810 MHz
18.1300	17.5050
18.1883	17.9210
18.3380	16.9280
18.4030	17.0030
18.5460	17.7130
18.7550	
18.9630	
19.0880	
19.1300	
19.1717	
19.2550	
19.2960	
19.3380	
19.5050	
19.5460	
19.6716	
19.7550	
19.8383	
19.8800	
19.9033	
19.2130	
19.3300	
19.4210	
19.5880	
18.3800	
18.075	
18.0058	
18.6038	
18.005	
18.1263	
18.0742	
18.1054	
18.1367	
18.0846	
18.1158	

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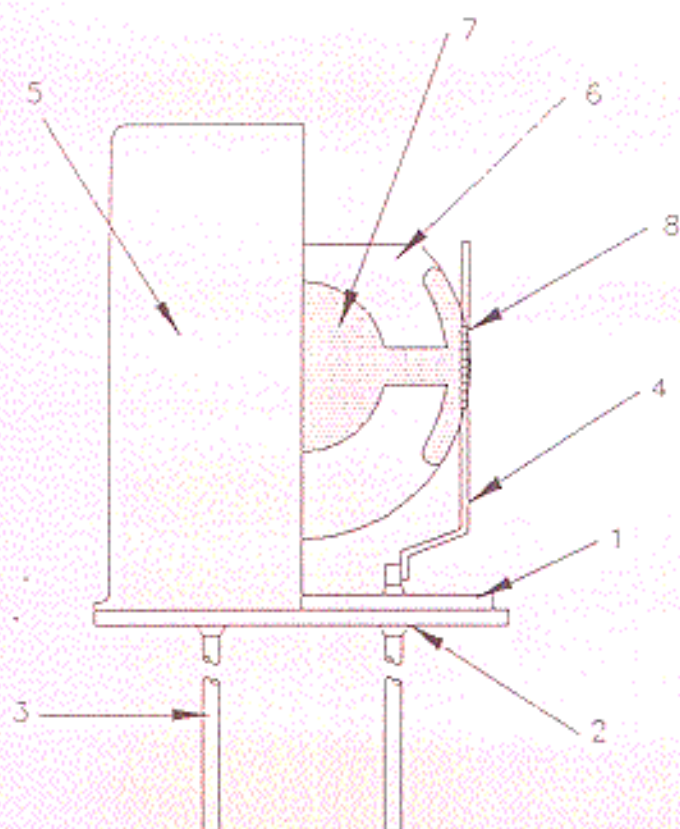


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FCC ID: H38WT-203P

EXHIBIT #: 7C

			DRAWING NAME	UM-1.2S		
			DRAWING NO.	SXD-00001		
1	NEW EDITION	95.11.04	SCALE	5:1	UNIT	mm
NO.	MODIFY CONTENTS	DATE	APPROVE	<i>c. tai</i>	DESIGNER	<i>p. L. L.</i>



PART NAME	MATERIAL	PART NAME	MATERIAL
1 BASE	KOVAR	5 COVER	CNR2-0
2 GLASS	BA-7H	6 BLANK	QUARTZ
3 LEAD	KOVAR	7 ELECTRODE	SILVER
4 PLATE SUPPORT	C7701-EH	8 ADHESIVES	SILVER GLUE

PART NAME	SURFACE PROCESS	PART NAME	SURFACE PROCESS
BASE	Ni-ELP 2-4u Au-P 0.1-0.5u	LEAD	Ni-ELP 2-4u Au-P 0.1-0.5u
COVER	MBNi (C) 0.5-1.0u		

			DRAWING NAME	X'TAL UM-1,UM-4,UM-5 Cutaway View
			DRAWING NO.	SEKAKU ELECTRON INDUSTRY CO., LTD.
1	NEW EDITION	96.07.29	SCALE	FCC ID: H38WT-203F
NO.	MODIFY CONTENTS	DATE	APPROVE	EXHIBIT #: 70