CRYSTAL UNIT SPECIFICATION

SPEC. NO. : _____

Customer's Name : _____ Date : 2009/10/06

1. General Provision

1-1 Hold Type : HC-49U, AT-Cut

1-3 Oscillation Mode : ■ Fundamental or □ 3rd Overtone

1-4 Visualization & Dimension : As per attached Drawing

2 Electrical Data

2-1 Nominal Frequency : 12.0000 MHz

2-2 Tolerance of Center Frequency : ± 30 x 10^{-6} (PPM) at 25 ℃

2-3 Frequency Stability: ± 30 x 10^{-6} (PPM) over Operating Temperature Range (2-4)

2-4 Operating Temperature Range : -20 ℃ to + 70 ℃

2-5 Storage Temperature Range : -40 ℃ to + 85 ℃

2-6 Aging : Less than ± 3 x 10^{-6} (PPM) 1 Year

2-7 Circuit : Measured in Saunders C1 Meter 150D

2-8 Load Capacitance : ■ 20 PF or □ Series

2-9 Drive Level : 0.1 mW

2-10 Effective Resistance Rr : Less than 50 OHMS(ESR)

2-11 Shunt Capacitance : 7 PF Max

2-12 Insulation Resistance : More than 500 M ohms at DC 100V

3 Reliability

3-1 Bend Test : Pins withstand 2 bends of 90 ° ref To base.

(Ref. MIL-STD 202F, Method 211, Condition C)

3-2 Vibration : 10~55Hz, duration of 6 hours, displacement 1.5mm, 3 mutually Perpendicular plans (Ref. MIL-STD 202F,Method 210A)

3-3 Shock : 1000G, 0.35MS, half sine-wave, 3 shocks of each plan.

(Ref. MIL-STD 883C, Method 2002.3, Condition C)

3-4 Solder ability : Put the leads of crystal units into solder melted tank for 3 to 5s

Temperature of solder melted tank is 245℃+-5℃

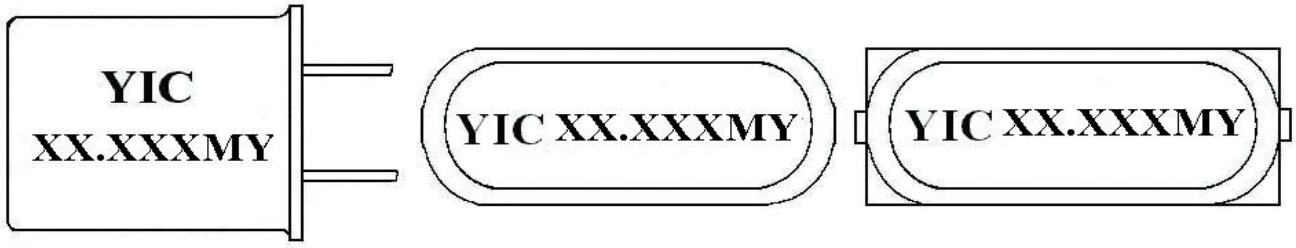
3-5 Fine lead : Mass spectrometer leak rate less than $2*10E^{-8}$ atm.cc/sec of Helium.

(Ref. MIL-STD 883C, Method 1014.8, Condition B)

3-6 Humidity : 85% relative humidity at 85℃ for 500 hours.

(Ref. MIL-STD 883C, Method 1004.6)

4 Marking :



49U **49US/SL** **49SMT/SLMT**

5 Remarks:

Brand : YIC

Frequency :12.000MHz

Month:M

■ **A:JAN** □ **B:FEB** □ **C:MAR** □ **D:APR** □ **E:MAY** □ **F:JUN**

□ **G:JUL** □ **H:AUG** □ **I:SEP** □**J:OCT** □ **K:NOV** □ **L:DEC**

Year:Y

■ **5:2005** □ **6:2006** □ **7:2007** □ **8:2008** □ **9:2009** □ **0:2010**

■DIMENSIONS (UNIT = mm)