

QUARTZ CRYSTAL UNIT SPECIFICATION

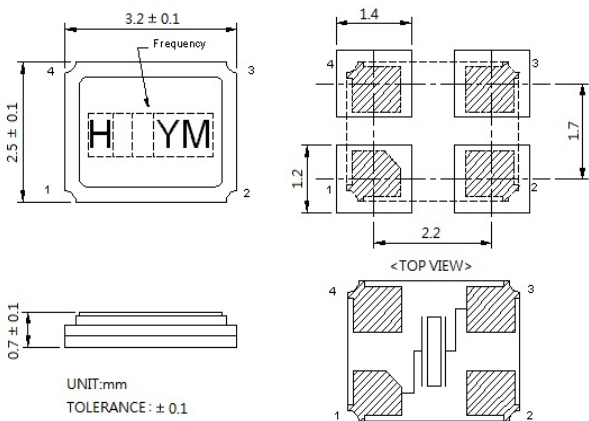
Customer:

HELE P/N : X3S024000D81H-X

Customer P/N:

Date : 2015/07/16

- | | | |
|--------------------------------|---|------------------|
| 1. Frequency: | 24.000000MHz | Reference |
| 2. Holder type : | HSX321S | |
| 3. Frequency tolerance: | +/-20 ppm at 25deg.C +/-3deg.C | |
| 4. Equivalent resistance: | 60 ohms Max. / SERIES | |
| 5. Storage temperature range: | -40 deg.C To +85 deg.C | |
| 6. Operable temperature range: | -20 deg.C To +70 deg.C | |
| 7. Temperature drift: | +/-30 ppm -20 deg.C To +70 deg.C | |
| 8. Loading capacitance (CL) : | 8.0 pF | |
| 9. Drive level: | 10uW (100uW Max.) | |
| 10. Shunt Capacitance: | 2.0 pF Max. | |
| 11. Insulation resistance : | More than 500M ohms at DC 100V | |
| 12. Mode of oscillation: | Fundamental | |
| 13. Circuit: | Measured in HP/E5100A,S&A 250B | |
| 14. Shocking : | Dropping from 120 cm height 3 times on Concrete floor | |
| Variation : | Frequency less than +/-5 ppm
Resistance less than +/- 15 % or 2ohms max. | |
| 15. Aging: | Less than +/- 3 ppm/ Year | |
| 16. Note: | | |



*Marking should be printed as following:

Logo, Nominal Frequency, Manufactured year & month

*Nominal frequency = integer only

(ex. 14.31818 MHz → 14)

*Manufacturing Lot No.

(Y: year) ex. 2000 shall be marked as ' 0 '

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Code	0	1	2	3	4	5	6	7	8	9

(M: month) ex. June shall be marked as ' F '

Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
A	B	C	D	E	F	G	H	J	K	L	M

Marking: Laser marking.



HARMONY ELECTRONICS CORP.