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Crystal Resonator Specification and Approval Sheet

Customer:

Project Name: N/A

Applications: N/A

Contact Person:

Customer Part No: N/A

1. Scope:

- 1.1 This specification applies to quartz crystal unit with a frequency of 32.768KHz, which will be used in crystal oscillator applications.

2. Construction:

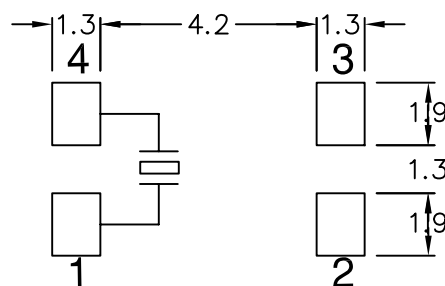
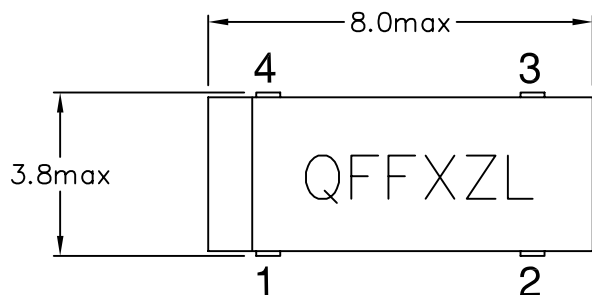
- 2.1 Type of Holder: SMLF-MP03 (RoHS compliant)
2.2 Enclosure Seal: Plastic Encapsulated, Cold Flo Alloy Seal

3. Characteristics:

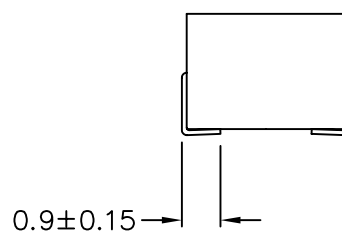
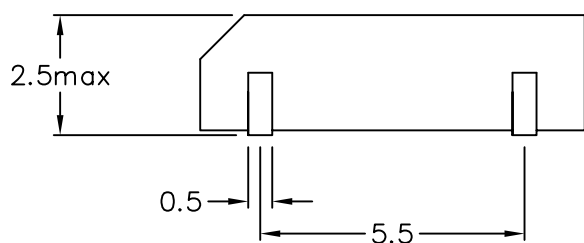
3.1	Nominal Frequency	(f)	32.768KHz
3.2	Frequency Tolerance	($\Delta f/f$)	± 20 ppm
3.3	Turn Over Temperature (frequency)	(θT)	25°C $\pm$ 5°C
3.4	Temperature Coefficient(frequency)	(a)	-0.034x0.006/°C ²
3.5	Load capacitance	(C _L)	12.5pF
3.6	Operating Temperature Range	(T _{OPR})	-40°C to +85°C
3.7	Storage Temperature Range	(T _{STG})	-55°C to +125°C
3.8	Drive Level	(D _L)	1.0μW
3.9	Series Resistance	(R ₁)	50K Ohm Max.
3.10	Insulation Resistance	(IR)	500M Ω Min.
3.11	Aging	(Δf_A)	± 5 ppm/Year Max.

				TITLE		DWG.	M Zhao
				CRYSTAL RESONATOR		DATE	2017-07-21
				PART NO	9WNA32768122TF50T4	TOLERANCE	CHKD. J Mok
				MODEL	SMLF-MP03	X $\pm$ X.X $\pm$	DATE 2017-07-21
						X.XX $\pm$ ANGULAR $\pm$	APPD. XM Sun
							DATE 2017-07-21
	DATE	MODIFY DESCRIPTION	BY	SALESMAN	Gary Lau	SHEET 1/2	REV 0

EXTERNAL DIMENSIONS



RECOMMENDED SOLDERING PATTERN



MARKING SPECIFICATIONS

Q — REPRESENT COMPANY'S LOGO
 FF — REPRESENT FREQUENCY (MHz)
 X — REPRESENT PRODUCTION LINE CODE
 Z — REPRESENT YEAR CODE RESPECTIVELY
 " Z " CODE IS PRODUCTION YEAR

FOR INSTANCE:

YEAR	2010	2011	2012	2013	2014
MARK	0	1	2	3	4

L — REPRESENT LOT CODE (1-Z)

2. DO NOT SCALE DRAWING

NOTES: 1. ALL DIMENSIONS ARE IN MM



Interquip Electronics Co., Ltd

				TITLE			DWN.	M_Zhao
				SMD TUNING FORK			DATE	2010.6.10
				PART NO.		TOLERANCE	CHKD	Johnson_Mok
				MODEL	SMLF-MP03	X.±0.3 X.X±0.15	DATE	2010.6.10
				REMARK		X.XX±0.05 ANGULAR±	APPD.	Xm_Sun
							DATE	2010.6.10
	DATE	MODIFY DESCRIPTION	BY			DWG.NO. 004-061A3-012	REV. 1	