



INTERQUIP ELECTRONICS CO., LIMITED

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Crystal Resonator Specification and Approval Sheet

Customer: RS COMPONENTS

Project Name: N/A

Applications: N/A

Contact Person: N/A

Customer Part Number: N/A

1. Scope:

1.1 This specification applies to quartz crystal unit with a frequency of 20.000000MHz, which will be used in crystal oscillator applications.

2. Construction:

2.1 Type of Holder: SMAQ-5032A (2pads) RoHS Compliant

2.2 Enclosure Seal: Epoxy Resin Hermetic Seal

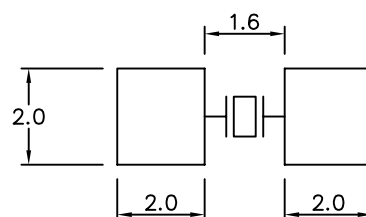
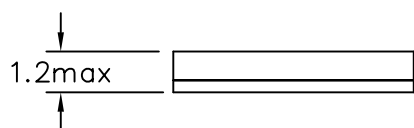
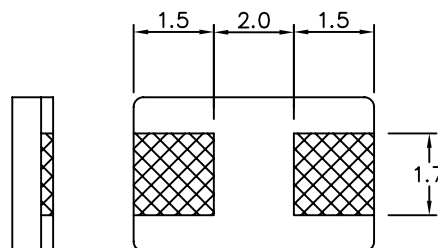
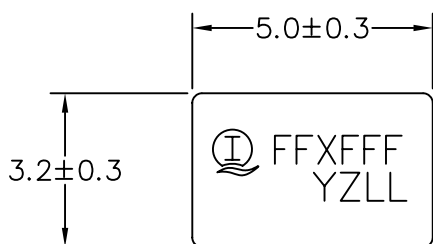
3. Characteristics:

3.1	Nominal Frequency	(f)	20.000000MHz
3.2	Mode of Vibration		Fundamental
3.3	Load Capacitance	(C _L)	12pF
3.4	Frequency Tolerance at 25 °C±3 °C	(Δ f/f)	±30 ppm
3.5	Resonance Resistance	(Ω)	50 Ohm Max.
3.6	Shunt Capacitance	(C ₀)	7pF Max.
3.7	Drive Level	(D _L)	0.1mW
3.8	Frequency Deviation with Temperature	(Δ f/f)	±30 ppm
3.9	Operating Temperature Range	(T _{OPR})	-40°C to 85°C
3.10	Storage Temperature Range	(T _{STG})	-40°C to 85°C
3.11	Insulation Resistance	(SR)	500M Ω or More
3.12	Aging	(Δ f _A)	± 5 ppm per Year Max.

				TITLE CRYSTAL RESONATOR		DWG.	M Zhao
						DATE	11-01-11
				PART NO	5RDA20000123TF50Q3	TOLERANCE	CHKD. J Mok
				MODEL	SMAQ-5032A (2 pads)	X± X.X±	DATE 11-01-11
				REMARK		X.XX± ANGULAR±	APPD. XM Sun
						DATE	11-01-11
DATE	MODIFY DESCRIPTION	BY	SALESMAN :Gary Chan	SHEET 1/3		REV	0

EXTERNAL DIMENSIONS

RECOMMENDED SOLDERING PATTERN



MARKING SPECIFICATIONS



— COMPANY'S LOGO

FF FFF — REPRESENT FREQUENCY (MHz)

X — REPRESENT PRODUCTION LINE CODE

YZ — REPRESENT MONTH & YEAR CODE RESPECTIVELY

" Y " :

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

" Z " CODE IS THE LAST NUMBER OF PRODUCTION YEAR
FOR INSTANCE:

YEAR	2009	2010	2011	2012	2013
MARK	9	0	1	2	3

LL — REPRESENT LOT CODE (AA-ZZ)

2. DO NOT SCALE DRAWING

NOTES: 1. ALL DIMENSIONS ARE IN MM



Interquip Electronics Co., Ltd

				TITLE SMD RESONATOR		DWN.	H_Zhang
						DATE	2009.3.2
				PART NO.	TOLERANCE	CHKD	M_Zhao
				MODEL SMAQ-5032	X.±0.3 X.X±0.15	DATE	2009.3.2
				REMARK	X.XX±0.05 ANGULAR±	APPD.	Xm_Sun
						DATE	2009.3.2
DATE	MODIFY DESCRIPTION	BY		DWG.NO. 004-061G9-006		REV.1	