



INTERQUIP ELECTRONICS CO., LIMITED

Flat A, 9th Floor, On Shing Industrial Building, 2-16 Wo Liu Hang Road,

Fotan, New Territories, Hong Kong

Tel: (852) 2413 5515 Fax: (852) 2413 7053

Web site: <http://www.interquip.com> Email: igl@interquip.com

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-5032B (4 pads)

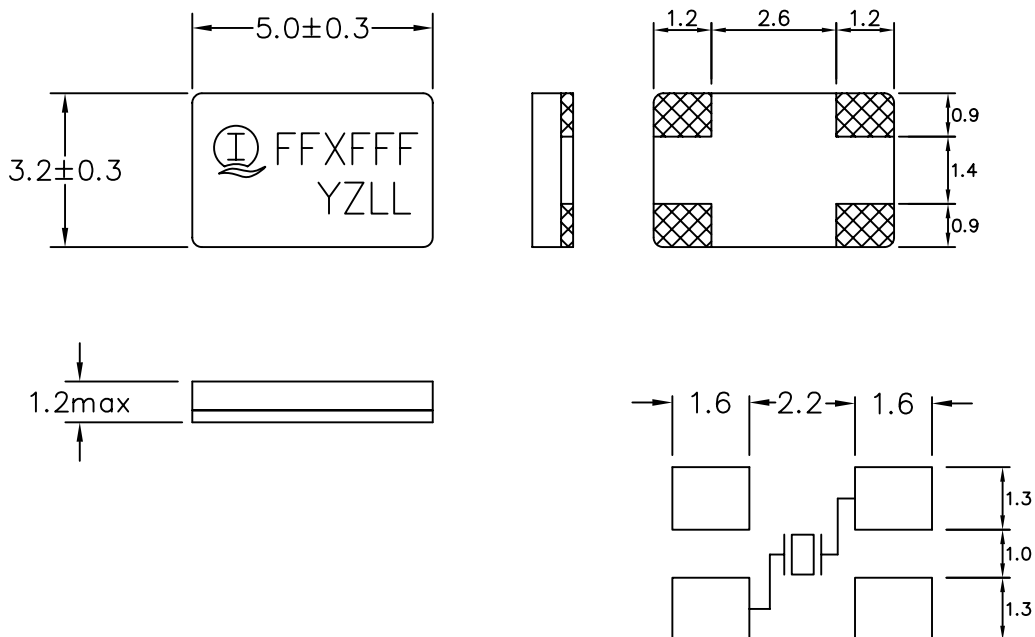
2.2 Enclosure Seal: Epoxy Resin Hermetic Seal (RoHS compliant)

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)	±30ppm
3.5	Resonance Resistance	(Ω)	50 Ohm Max.
3.6	Shunt Capacitance	(C ₀)	7.0pF Max.
3.7	Drive Level	(D _L)	100 uW
3.8	Frequency Deviation with Temperature	(Δ f/f)	±30ppm
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 5RCA20000123TF50Q3	TOLERANCE	CHKD.	CS Chiang
				MODEL SMAQ-5032B (4 pads)	X.± X.X±	DATE	11-01-11
					X.XX± ANGULAR±	APPD.	XM Sun
						DATE	11-01-11
DATE	MODIFY DESCRIPTION	BY	SALESMAN: Gary Chan		SHEET 1/2	REV	0

EXTERNAL DIMENSIONS



MARKING SPECIFICATIONS

RECOMMENDED SOLDERING PATTERN

 — 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.		CHKD	M_Zhao
				MODEL SMAQ-5032		DATE	2009.3.2
				REMARK		APPD.	Xm_Sun
						DATE	2009.3.2
DATE	MODIFY DESCRIPTION	BY		DWG.NO. 004-061G7-005		REV.1	