



# 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](mailto: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 24.000000MHz, Which will be used in crystal oscillator applications.

### 2. Construction:

2.1 Type of Holder: SMAQ-6035A (2 pads)

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

### 3. Characteristics:

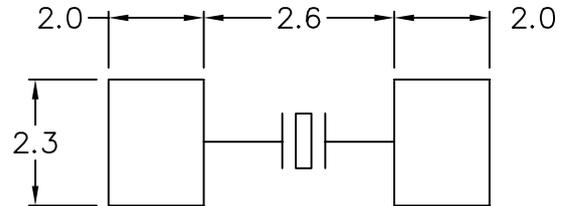
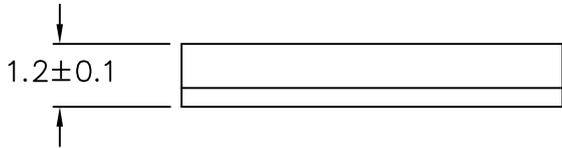
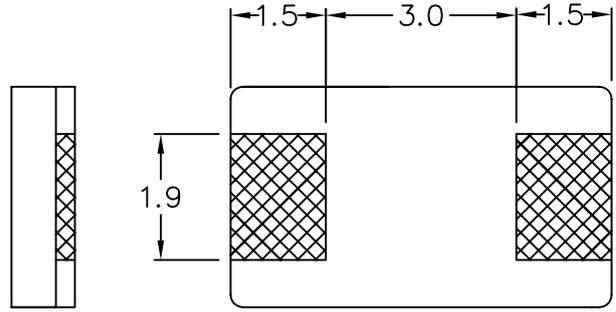
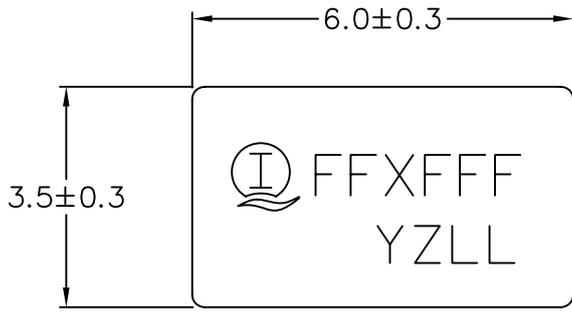
3.1	Nominal Frequency	(f)	24.000000MHz
3.2	Mode of Vibration		Fundamental
3.3	Load Capacitance	(C <sub>L</sub> )	12pF
3.4	Frequency Tolerance at 25 °C±3 °C	(Δ f/f)	± 30ppm
3.5	Resonance Resistance	(Ω)	50 Ohm Max.
3.6	Shunt Capacitance	(C <sub>0</sub> )	7.0pF Max.
3.7	Drive Level	(D <sub>L</sub> )	100 uW
3.8	Frequency Deviation with Temperature	(Δ f/f)	±30 ppm
3.9	Operating Temperature Range	(T <sub>OPR</sub> )	-40°C to 85 °C
3.10	Storage Temperature Range	(T <sub>STG</sub> )	-40°C to 85 °C
3.11	Insulation Resistance	(SR)	500M Ω or More
3.12	Aging	(Δ f <sub>A</sub> )	±5 ppm per Year Max.

### 4. Special Requirements:

No special requirement is needed

				TITLE <b>CRYSTAL RESONATOR</b>		DWG.	M Zhao
						DATE	11-01-11
				PART NO <b>5QDA24000123TF50Q3</b>	TOLERANCE	CHKD.	CS Chiang
				MODEL <b>SMAQ-6035A (2 pads)</b>	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 1/2		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
				PART NO.		DATE	2009.3.2
				MODEL SMAQ-6035		CHKD	M_Zhao
				REMARK		DATE	2009.3.2
						APPD.	Xm_Sun
						DATE	2009.3.2
DATE	MODIFY DESCRIPTION	BY		DWG.NO. 004-061D9-008		REV.2	