



# 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 16.384000MHz, Which will be used in crystal oscillator applications.

### 2. Construction:

2.1 Type of Holder: SMAQ-7050B (4 pad) (RoHS Compliant)

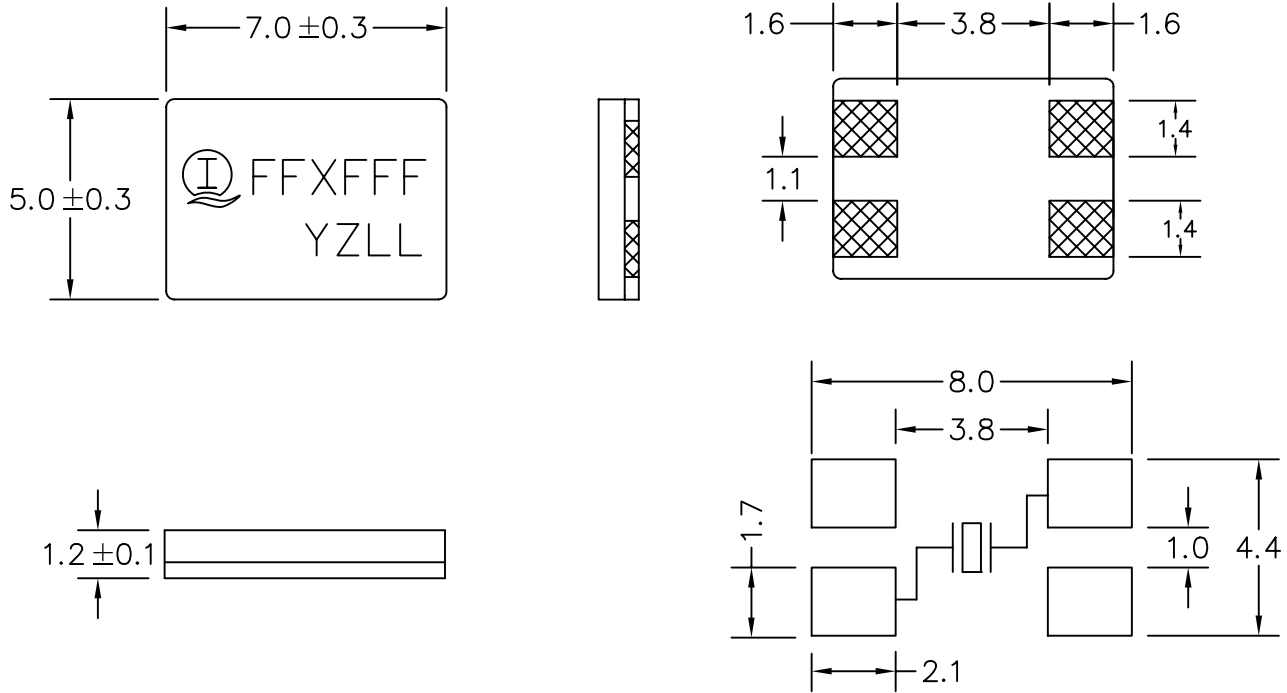
2.2 Enclosure Seal: Expoy Resin Hermetic Seal

### 3. Characteristics:

3.1	Nominal Frequency	(f)	16.384000MHz
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)	60 Ohm Max.
3.6	Shunt Capacitance	(C <sub>0</sub> )	7.0pF Max.
3.7	Drive Level	(D <sub>L</sub> )	0.1mW
3.8	Frequency Deviation with Temperature	(Δ f/f)	±30ppm
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.

				TITLE <b>CRYSTAL RESONATOR</b>		DWG.	M Zhao
						DATE	11-01-13
				PART NO : 5PCA16384123TF60Q3	TOLERANCE	CHKD.	M Zhao
				MODEL SMAQ-7050B (4 pad)	X.± X.X±	DATE	11-01-13
				REMARK	X.XX± ANGULAR±	APPD.	XM Sun
						DATE	11-01-13
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

<b>Interquip Electronics Co., Ltd</b>			
TITLE SMD RESONATOR			DWN. H_Zhang
			DATE 2009.3.2
PART NO.		TOLERANCE	
MODEL SMAQ-7050		X.±0.3 X.X±0.15	
REMARK		X.XX±0.05 ANGULAR±	
		DATE 2009.3.2	
		APPD. Xm_Sun	
		DATE 2009.3.2	
DATE	MODIFY DESCRIPTION	BY	DWG.NO. 004-061F7-004 REV.1