

### SPECIFICATION OF QUARTZ CRYSTAL UNITS

**1.HOLDER TYPE:** **SMD SEAM SEALING X'TAL 3.2\*2.5**  
13.521270 MHz

### 2. ELECTRICAL SPECIFICATIONS

Standard atmospheric conditions

Unless otherwise spcified, the standard range of atmospheric conditions for making measurement

Ambient temperature : 25±3℃  
Relative humidity : 40% ~ 70%

If there is any doubt about the results ,measurement shall be made within the following limits .

Ambient temperature : 25±3℃  
Relative humidity : 40% ~ 70%

Electrical characteristics measured by S&A250B or equivalent .

The crystal is using AT CUT (thickness shear mode).

### 3.ELECTRICAL CHARACTERISTICS

	Parameters	SYM	Electrical Spec				Notes
			MIN	TYP	MAX	UNITS	
1	Nominal Frequency	FL	13.521270			MHz	
2	Oscillation mode	-	Fundamental			-	
3	Load Capacitance	CL	10			pF	
4	Frequency Tolerance	-	±20			ppm	at 25±3℃
5	Operating Temperature	-	-40	~	85	℃	
6	Temperature drift (TC)	-	±30			ppm	-40℃~85℃
	Temperature drift (TC)	-				ppm	
	Temperature drift (TC)	-				ppm	
7	Equivalent Resistance Rr	Rr	-	-	80	Ω	
8	Drive Level	DL	-	100	300	uW	
9	Shunt Capacitance C0	C0	-	-	2.00	pF	
10	Insulation Resistance	-	500	-	-	MΩ	at DC 100V
11	Aging	-	±1			ppm	Year
12	Storage Temperature Range	-	-55	~	125	℃	

