

# RXT2520AT



## SMD Communication Crystal

Low profile SMD AT-cut quartz crystal with thermally coupled temperature sensor in a ceramic package with a 2.5 mm x 2.0 mm foot print.



### Product description

Miniature low profile AT-cut quartz crystal with thermally coupled temperature sensor. True SMD style, ceramic package with nickel plated lid, seam welded. The product is supplied on tape and reel.

### Applications

- Automotive
- Communications
- GPS
- Mobile Phones
- WiFi

### Features

- Excellent shock and vibration performance
- Low aging
- Thermally coupled temperature sensor

### Specifications

#### 1.0 SPECIFICATION REFERENCE

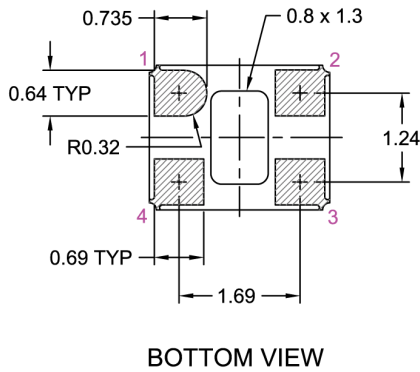
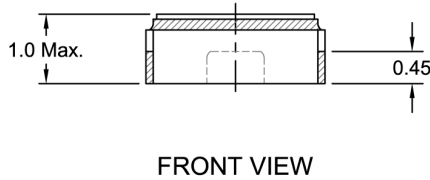
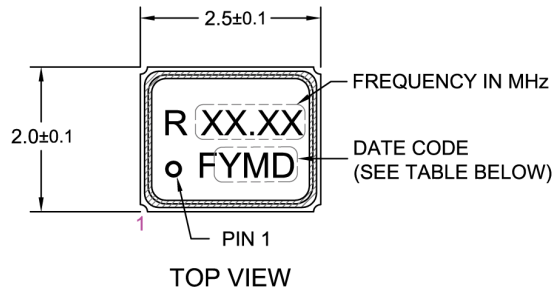
Line	Parameter	Description
1.1	Model description	RXT2520AT
1.2	RoHS compliant	Yes
1.3	Reference number	
1.4	Rakon part number	

#### 2.0 FREQUENCY CHARACTERISTICS

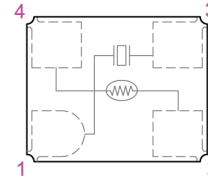
Line	Parameter	Test Condition	Value	Unit
2.1	Frequency		16.368 to 52	MHz
2.2	Calibration tolerance	Frequency at 25°C ±2°C and specified load capacitance	±10 to 50	ppm
2.3	Reflow shift	Frequency shift after reflow with 4 hours settling at 25°C	±1 max	ppm
2.4	Frequency stability over temperature	Referenced to frequency reading at 25°C and the specified load capacitance	±12 to 50	ppm
2.5	Temperature range	Operating temperature	-40 to 85	°C
2.6	Frequency perturbations	Residual error from the frequency versus temperature curve fit 5th order. Minimum of 1 frequency reading every 3°C over the operating temperature range	±0.5 max	ppm
2.7	Long term stability	Frequency drift over 1 year at 25°C	±1 max	ppm
2.8	G sensitivity	Gamma vector of all three axes from 30Hz to 1500Hz at 10 RMS	2 max	ppb/g

# Drawing Name: RXT2520AT Model Drawing

## MODEL OUTLINE



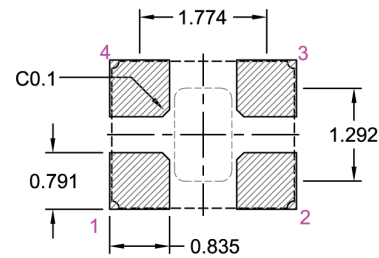
## EQUIVALENT CIRCUIT - TOP VIEW



### PIN CONNECTIONS

1	CRYSTAL
2	GND
3	CRYSTAL
4	THERM

## RECOMMENDED PAD LAYOUT - TOP VIEW



### Y - Year Code

Code	Year	Code	Year
A	2010	N	2023
B	2011	O	2024
C	2012	P	2025
D	2013	Q	2026
E	2014	R	2027
F	2015	S	2028
G	2016	T	2029
H	2017	U	2030
I	2018	V	2031
J	2019	W	2032
K	2020	X	2033
L	2021	Y	2034
M	2022	Z	2035

### M - Month Code

Code	Month
1	Jan
2	Feb
3	Mar
4	Apr
5	May
6	Jun
7	Jul
8	Aug
9	Sep
A	Oct
B	Nov
C	Dec

### D - Day Code

Code	Day	Code	Day	Code	Day
1	1	E	14	R	27
2	2	F	15	S	28
3	3	G	16	T	29
4	4	H	17	U	30
5	5	I	18	V	31
6	6	J	19		
7	7	K	20		
8	8	L	21		
9	9	M	22		
A	10	N	23		
B	11	O	24		
C	12	P	25		
D	13	Q	26		

TITLE: RXT2520AT MODEL

RELATED DRAWINGS:

FILENAME: CAT625

REVISION: D

DATE: 19-Jan-12

SCALE: 10 : 1

Millimetres

TOLERANCES:

XX =

X.X =

X.XX = ±0.10

X.XXX = ±0.05

X° =

Hole =

**rakon**

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