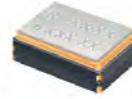


SMD Temperature Compensated Crystal Oscillators

Low cost SMD TCXO with voltage control option, using an analogue IC for compensation. Frequencies ranging from 10MHz to 40MHz.

**Product description**

The IT3200C with voltage control option, employs an analogue IC for the oscillator and temperature compensation. The RSX-8 crystal is surface mounted on top of the ceramic IC carrier. The segregation of the crystal from the oscillator further improves the reliability of the product.

Applications

- Feature phone
- GPS
- Wi-Fi
- WiMAX/W-LAN
- Other

Features**Specifications****1.0 SPECIFICATION REFERENCES**

Line	Parameter	Description
1.1	Model description	IT3200C / IVT3200C
1.2	RoHS Compliant	Yes
1.3	Reference number	
1.4	Rakon part number	

2.0 FREQUENCY CHARACTERISTICS

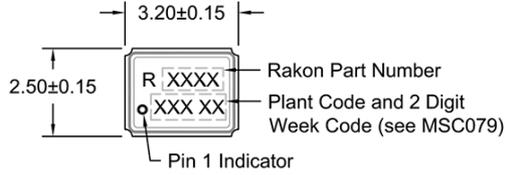
Line	Parameter	Test Condition	Value	Unit
2.1	Frequency		10 to 40	MHz
2.2	Frequency calibration	Offset from nominal frequency measured at 25°C	±1 max	ppm
2.3	Reflow shift	Two consecutive reflows as per attached profile after 1 hour recovery at 25°C	±1 max	ppm
2.4	Temperature range	The operating temperature over which the frequency stability is measured	-40 to 85	°C
2.5	Frequency stability over temperature	Referenced to the midpoint between minimum and maximum frequency value over the specified temperature range. Control voltage set to midpoint of control voltage (Note 1)	±0.5 to 5	ppm
2.6	Frequency slope	Minimum of 1 frequency reading every 2°C, over the operating temperature range (Note 1)	0.05 to 1	ppm/°C
2.7	Static temperature hysteresis	Frequency change after reciprocal temperature ramped over the operating range. Frequency measured before and after at 25°C	0.6 max	ppm
2.8	Supply voltage stability	Supply voltage varied ±5% at 25°C	±0.1 max	ppm
2.9	Load sensitivity	±10% load change	±0.2 max	ppm
2.10	Long term stability	Frequency drift over 1 year at 25°C	±2 max	ppm

3.0 POWER SUPPLY

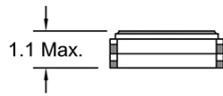
Line	Parameter	Test Condition	Value	Unit
3.1	Supply voltage	Nominal supply voltage	2.4 to 3.7	V
3.2	Current	At maximum supply voltage (Note 2)	2 max	mA

Drawing Name: I(V)T3200C Model Drawing (1.1mm Max.)

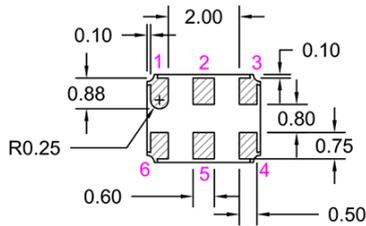
MODEL DRAWING



TOP VIEW



FRONT VIEW



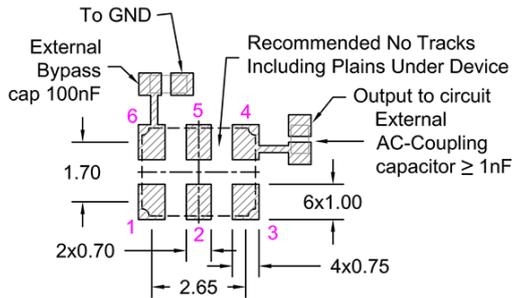
BOTTOM VIEW

PIN CONNECTIONS

Pin	IT	IVT
1	GND	VCO
2	NC	NC
3	GND	GND
4	OUTPUT	OUTPUT
5	NC	NC
6	V _{DD}	V _{DD}

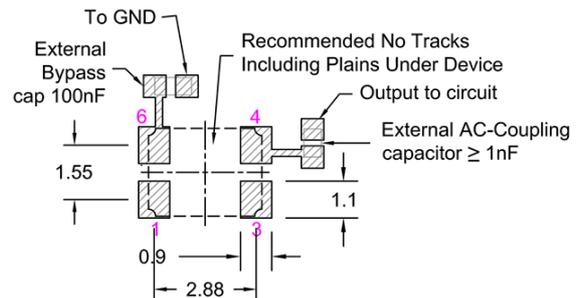
RECOMMENDED LAYOUT

- TOP VIEW, 6 PAD



RECOMMENDED LAYOUT

- TOP VIEW, 4 PAD



TITLE: I(V)T3200C MODEL

RELATED DRAWINGS:

FILENAME: CAT434

REVISION: G

DATE: 30-Jul-13

SCALE: 5 : 1

Millimetres

TOLERANCES:

XX = ±0.5

X.X = ±0.2

X.XX = ±0.10

X.XXX = ±0.05

X° = ±1.0°

Hole = ±0.10

rakon

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