

RF Modules

QVC50 Series

VCOs

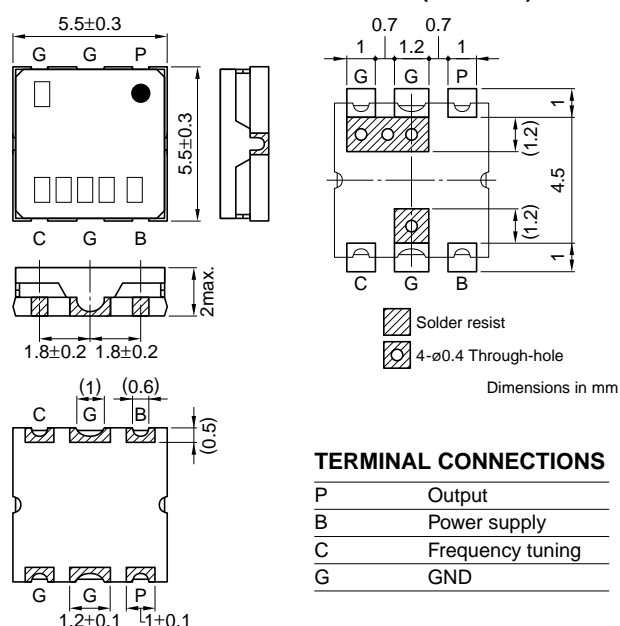
For Cellular Phone/Single Band 5.5x5.5

FEATURES

- VCO for mobile communication equipment applications in the roughly 0.7 to 2GHz frequency range.
- Compact, low profile and light weight type(L5.5×W5.5×T1.7mm, 120mg typ.).
- Low voltage operation, low current consumption.
- Makes cost reduction possible.

SHAPES AND DIMENSIONS/

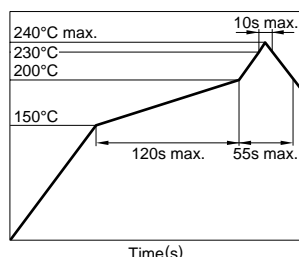
RECOMMENDED PC BOARD PATTERN(REFLOW)



TERMINAL CONNECTIONS

P	Output
B	Power supply
C	Frequency tuning
G	GND

RECOMMENDED REFLOW SOLDERING CONDITIONS



ELECTRICAL CHARACTERISTICS

PART NO. : QVC500720RT-3016

APPLICATION : PDC

Measuring conditions : Ta=25±2°C Vcc=2.1V

Parameter	Unit	Min. value	Typical value	Max. value
Oscillation frequency	MHz	682	720	758
Current consumption	mA	–	5.3	6
Output power [at Fo]	dBm	–6	–3	0
C/N ratio				
[at Fo, Offset frequency=50kHz, B.W.=21Hz]	dBc/Hz	–	–70	–67
Tuning sensitivity [Vt=0.4 to 2.4V]	MHz/V	44	52	60
Frequency pushing [Vcc=2.1±0.2V]	MHz	–	±0.6	±1.5
Frequency pulling [VSWR=2, all phases]	MHz	–	±0.4	±2
Spurious level	dBc	–	–30	–15
Operating temperature range	°C	–20	–	+75
Storage temperature range	°C	–40	–	+85

PART NO. : QVC500946RT-3040

APPLICATION : GSM

Measuring conditions : Ta=25±2°C Vcc=3.6V

Parameter	Unit	Min. value	Typical value	Max. value
Oscillation frequency	MHz	920	946	972
Current consumption	mA	–	7.5	10
Output power [at Fo]	dBm	–3	0	+3
C/N ratio				
[at Fo, Offset frequency=3000kHz, B.W.=1Hz]	dBc/Hz	–	–152	–143
Tuning sensitivity [Vt=0.6 to 3V]	MHz/V	23.5	28	32.5
Frequency pushing [Vcc=3.6±0.2V]	MHz	–	±0.2	±0.6
Frequency pulling [VSWR=2, all phases]	MHz	–	±0.6	±1.5
Spurious level	dBc	–	–30	–15
Operating temperature range	°C	–25	–	+75
Storage temperature range	°C	–40	–	+85

PART NO. : QVC501840RT-3041

APPLICATION : DCS

Measuring conditions : Ta=25±2°C Vcc=3.6V

Parameter	Unit	Min. value	Typical value	Max. value
Oscillation frequency	MHz	1790	1842	1891
Current consumption	mA	–	8	10
Output power [at Fo]	dBm	–2	0	+2
C/N ratio				
[at Fo, Offset frequency=3000kHz, B.W.=1Hz]	dBc/Hz	–	–145	–143
Tuning sensitivity [Vt=0.6 to 3V]	MHz/V	55	65	75
Frequency pushing [Vcc=3.6±0.2V]	MHz	–	±0.2	±0.6
Frequency pulling [VSWR=2, all phases]	MHz	–	±1	±3
Spurious level	dBc	–	–20	–15
Operating temperature range	°C	–25	–	+75
Storage temperature range	°C	–40	–	+85

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