

RF Modules

VCOs

For Cellular Phone/Single Band 8.5x6.5

QVC81 Series

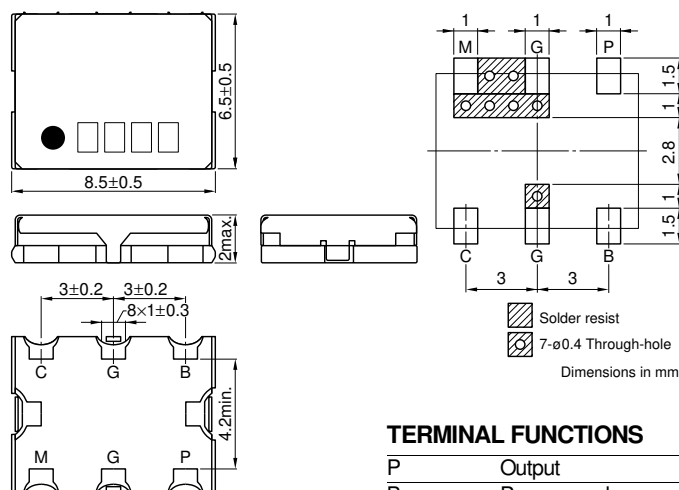
High Power Type

FEATURES

- VCO for mobile communication equipment TX (sending) applications. Roughly 0.5 to 2GHz frequency range, high power.
- Occupation area of component can be reduced because external pre-amp is not needed.
- Compact, low profile and light weight type (L8.5×W6.5×T1.8mm, 210mg typ.).
- Low voltage operation, low current consumption.
- Makes cost reduction possible.

SHAPES AND DIMENSIONS/

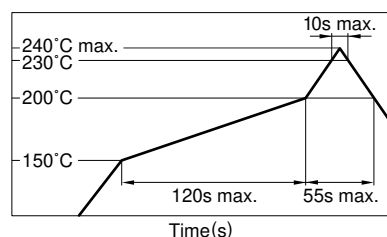
RECOMMENDED PC BOARD PATTERN



TERMINAL FUNCTIONS

P	Output
B	Power supply
C	Frequency tuning
G	GND
M	GND

RECOMMENDED REFLOW SOLDERING CONDITIONS



ELECTRICAL CHARACTERISTICS

PART NO. : QVC811747RT-2128

APPLICATION : DCS TX(High power)

Measuring conditions : Ta=25±2°C Vcc=2.75V

Parameter	Unit	Min. value	Typical value	Max. value
Oscillation frequency	MHz	1710	1747.5	1785
Current consumption	mA	—	25	35
Output power [at Fo]	dBm	+5	+7.5	+10
C/N ratio [at Fo, Offset frequency=10kHz, B.W.=1Hz]	dBc/Hz	—	−93	−85
Tuning sensitivity [Vt=0.7 to 1.9V]	MHz/V	80	90	100
Frequency pushing [Vcc=2.75±0.15V]	MHz	—	±1	±2
Frequency pulling [VSWR=2, all phases]	MHz	—	±2	±3
Spurious level	dBc	—	−15	−10
Operating temperature range	°C	−20	—	+75
Storage temperature range	°C	−40	—	+85

PART NO. : QVC810898RT-2127

APPLICATION : GSM TX(High power)

Measuring conditions : Ta=25±2°C Vcc=2.75V

Parameter	Unit	Min. value	Typical value	Max. value
Oscillation frequency	MHz	880	897.5	915
Current consumption	mA	—	25	35
Output power [at Fo]	dBm	+5	+7.5	+10
C/N ratio [at Fo, Offset frequency=10kHz, B.W.=1Hz]	dBc/Hz	—	−102	−85
Tuning sensitivity [Vt=0.7 to 1.9V]	MHz/V	35	45	55
Frequency pushing [Vcc=2.75±0.15V]	MHz	—	±0.5	±1
Frequency pulling [VSWR=2, all phases]	MHz	—	±1	±2
Spurious level	dBc	—	−25	−15
Operating temperature range	°C	−20	—	+75
Storage temperature range	°C	−40	—	+85

• Company and product names mentioned are registered trademarks.