

# RF Modules

## VCOs

For Cellular Phone/Single Band 8.5x6.5

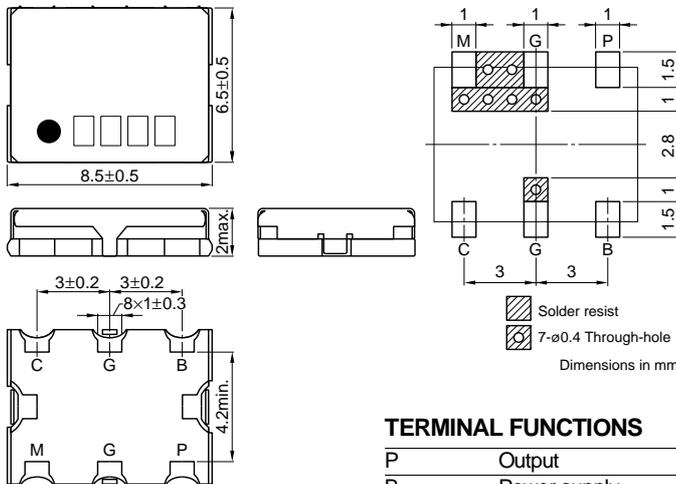
# QVC81 Series

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 (L8.5xW6.5xT1.8mm, 210mg typ.).
- Low voltage operation, low current consumption.
- Makes cost reduction possible.

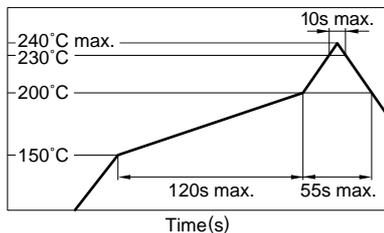
### SHAPES AND DIMENSIONS/ RECOMMENDED PC BOARD PATTERN



### 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

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