## **RF Modules**

**VCOs** 

For Cellular Phone/Single Band 8.5x6.5

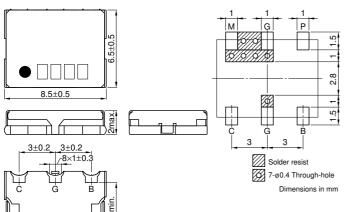
### **QVC81 Series**

## **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
В	Power supply
С	Frequency tuning
G	GND
M	GND

#### **ELECTRICAL CHARACTERISTICS**

PART NO.: QVC811747RT-2128 APPLICATION: DCS TX(High power)

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

Unit	Min. value	Typical value	Max. value
MHz	1710	1747.5	1785
mA	_	25	35
dBm	+5	+7.5	+10
dBc/Hz	-	-93	-85
MHz/V	80	90	100
MHz	-	±1	±2
MHz	-	±2	±3
dBc	_	-15	-10
°C	-20	-	+75
°C	-40	-	+85
	MHz mA dBm dBc/Hz MHz/V MHz MHz dBc °C	Unit         value           MHz         1710           mA         -           dBm         +5           dBc/Hz         -           MHz/V         80           MHz         -           MHz         -           dBc         -           °C         -20	Value         value         value           MHz         1710         1747.5           mA         -         25           dBm         +5         +7.5           dBc/Hz         -         -93           MHz/V         80         90           MHz         -         ±1           MHz         -         ±2           dBc         -         -15           °C         -20         -

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	<del>-</del> 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	<del>-4</del> 0	-	+85		

 $<sup>\</sup>bullet$  Company and product names mentioned are registered trademarks.

# RECOMMENDED REFLOW SOLDERING CONDITIONS

