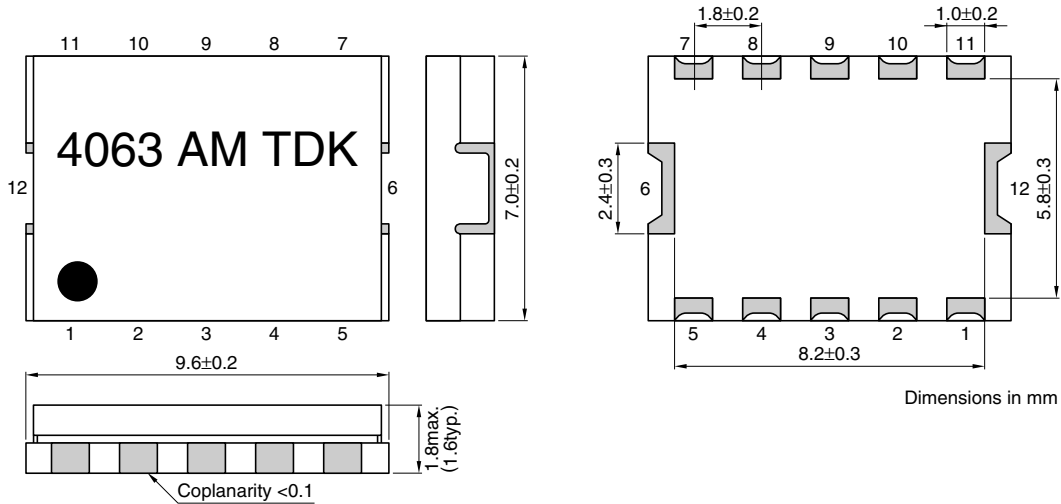


VCOs For Cellular Phone

QVC961747RT-4063 for GSM/DCS Tx

SHAPES AND DIMENSIONS



TERMINAL FUNCTIONS

1	Power supply (DCS)
2	GND
3	Frequency tuning
4	GND
5	Power supply (GSM)
6	GND
7	Output (GSM)
8	Vsw1
9	GND
10	Vsw2
11	Output (DCS)
12	GND

Dimensions in mm

SWITCHING LOGIC

SW logic	Vsw1	Vsw2
DCS band	High	Low
GSM band	Low	High
No oscillation	High	High

• DC level of logic: L=0 to 0.3V, H=2 to 2.8V

ELECTRICAL CHARACTERISTICS

Item			GSM band			DCS band		
			Minimum value	Typical value	Maximum value	Minimum value	Typical value	Maximum value
Supply voltage Vcc	(V)		2.7	2.8	2.9	2.7	2.8	2.9
Tuning voltage Vt	(V)		0.5	1.35	2.2	0.5	1.35	2.2
Temperature range	Operating	(°C)	-20	+25	+75	-20	+25	+75
	Storage	(°C)	-40	+25	+85	-40	+25	+85
Frequency range fo	(MHz)		880	897.5	915	1710	1747.5	1785
Tuning voltage sensitivity	[Vt=0.5 to 2.2V average]	(MHz/V)	27	34	41	55	66	77
Current consumption	(mA)		—	15	25	—	20	25
Output power	[at fo]	(dBm)	5.0	7.5	10.0	5.0	7.5	10.0
C/N	[Offset frequency=10kHz, B.W.=1Hz]	(dBc/Hz)	—	-101	-92	—	-94	-90
	[Offset frequency=400kHz, B.W.=1Hz]	(dBc/Hz)	—	-138	-122	—	-126	-120
	[Offset frequency=20MHz, B.W.=1Hz]	(dBc/Hz)	—	-166	-164	—	-159	-157
Frequency pushing	[Vcc=±0.1V]	(MHz)	—	±0.1	±1.5	—	±0.8	±2.5
Frequency pulling	[VSWR=2.0]	(MHz)	—	±1.5	±2.5	—	±2.0	±5.0
Harmonics	(dBc)		—	-25	-18	—	-25	-18