

SMD Voltage Controlled Oscillator

Frequency

1860-1868MHz

VT1865M

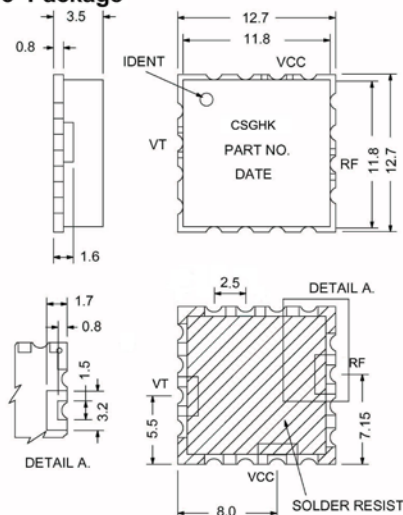
Features

- Miniature Size
- Surface Mount Package
- Electrically Shielded
- Low Phase Noise
- Highly Linear Tuning

Description

The VT1865M is a fundamental single ended oscillator designed for use in cost sensitive wireless and telemetry applications. The device has been optimized by careful selection of the bipolar transistor and varactor diode for low phase noise and high linearity tuning characteristics.

SK605 Package



Electrical Specifications, $T_A = +25^\circ\text{C}$, $V_{CC} = +5\text{V}$ (unless otherwise stated)

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Frequency Rangs		MHz	1860		1868
Tuning Voltage (V)		V	0.5		4.5
RF Output Power	1860–1868MHz	dBm	–2.0		+2.0
Supply Voltage (VCC)		V	4.75	5	5.25
Supply Current (Icc)		mA		15	20
Phase Noise :					
	@10kHz Offset:	dBc/Hz		–104	–100
	@100kHz Offset:	dBc/Hz		–124	–120
Average Tuning Sensitivity	1860–1868MHz	MHz/V		4	
Harmonic Outputs		dBc		–15	
OperatingTemperature Range		$^\circ\text{C}$			
Tune Input Capacitance		PF		18	

Comments

All specifications apply with a 50 ohm load impedance.