

WVO-907A Series VCO
Product Data Sheet

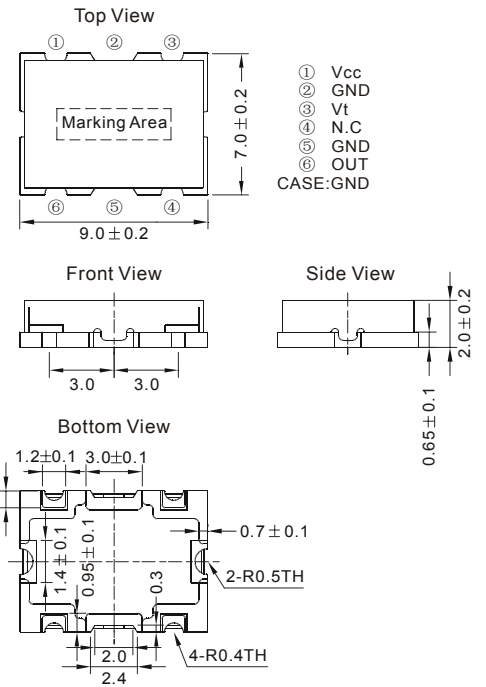
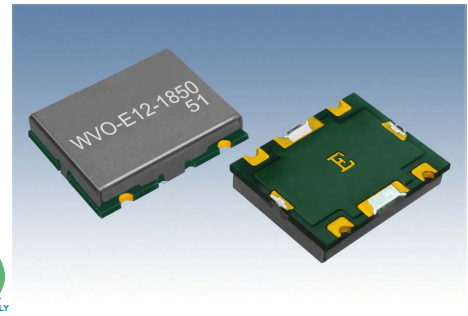
INNOVATION BEYOND IMAGINATION

Features

- Wide Frequency Range from 10MHz to 10GHz
- Small Size, Light Weight, Compatible Package
- Superior Stability in Response to Ambient Temperature and Load Variations
- Extremely Linear and Accurate Tuning
- High Tuning Speed
- Excellent Low Phase Noise Characteristics(C/N,S/N)
- High Performance and High Reliability
- Custom Designs Available

Applications

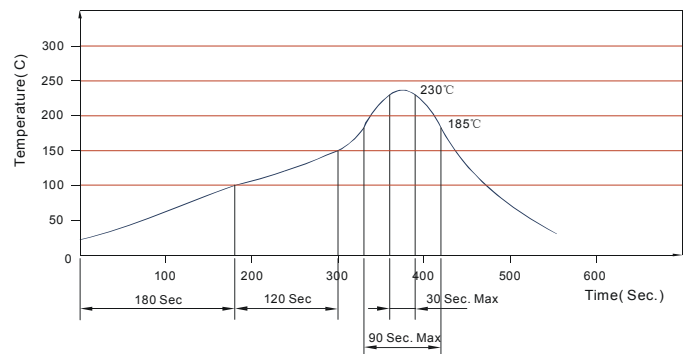
- Wireless Communication and Test Equipment
- Radar Receivers and Satellite Systems
- Base Stations
- Analog and Digital Radio Systems
- Industrial Controls and Noise Measurements



Pad Alignments:

Pad Alignments:	
Pad #1	Vcc
Pad #2	GND
Pad #3	Vt
Pad #4	N.C
Pad #5	GND
Pad #6	RF OUT

Solder Profile



WVO-907A Series VCO

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Specification:

Parameter	Symb.	Condition	Min.	Typ.	Max.	Unit	Note
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Absolute Maximum Ratings

Storage Temp.	Ts		-45		+95	°C	
Supply Voltage	Vcc		4.75		5.25	V	
Tuning Voltage	Vt		0		5.25	V	

Electrical

Frequency Range	FL				1805	MHz	Vt=2.2V	All parameters for 1805MHz to 1880MHz
	FU		1880			MHz	Vt=4.2V	
Supply Voltage	Vcc			5.0		V	5.0±0.25V	
Supply Current	Icc				30	mA	Vcc=5.0V	
Output Load				50		Ω		
Output Power			+1	+3	+5	dBm		
2 nd Output Power						dBm	Optional	
Output Ripple					±1.0	dB	N/A	
Tuning Voltage	Vt		2.2		4.2	V		
Tuning Sensitivity			38			MHz/V		
Input Impedance		Vt=0V,@1MHz	10			MΩ		
Pushing Figure		Vcc=5V±0.25V			±1.0	MHz/V		
Pulling Figure		VSWR=1.7			1.0	MHz	For all Phase	
SSB Phase Noise		10KHz		-103	-100	dBc/Hz		
		100KHz		-123	-120			
		1000KHz		-140	-135			
Harmonics Below Carrier					-20	dBc	2nd,3rd Harmonics	
Spurious Below Carrier					-80	dBc		
Operating Temp.	To		-40		+85	°C		
Package		SMD(9.0×7.0×2.0)				mm		

Environmental and Mechanical

Temperature & Humidity	Per MIL-STD-883,Method 1010,Cond.B & MIL-STD-883, Method 1011,Cond.B
Mechanical Shock	Per MIL-STD-202,Method 213,Cond.E, 30G, 11 mS, 3 cycles each plane
Vibration	Per MIL-STD-883,Method 2007,Cond.A, 5G, 30Hz to 2000Hz, 6 hours
Thermal Shock	Per MIL-STD-883,Method 1011,Cond.A, -40°C 30M to +85°C 30M, 7 days
Soldering Condition	Leads temperature 260°C for 10s max, 230°C for 30s max, SMD profile

Electrical Connections

Pad Function	Pad # 1-Vcc, Pad # 2-GND, Pad # 3-Vt, Pad # 4-N.C, Pad # 5-GND, Pad # 6-RF OUT
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Creating a Part Number

WVO-907A - Frequency, MHz

Temperature Range

Code	Specification
A	0°C to 50°C
B	-10°C to 60°C
C	-20°C to 75°C
D	-30°C to 75°C
E	-40°C to 85°C
F	-45°C to 90°C

Supply Voltage

Code	Specification
5	5.0V±5%
8	8.0V±5%
12	12.0V±5%
	Other Options

Not all combinations are available.Consult Your Local Sales Offices.