



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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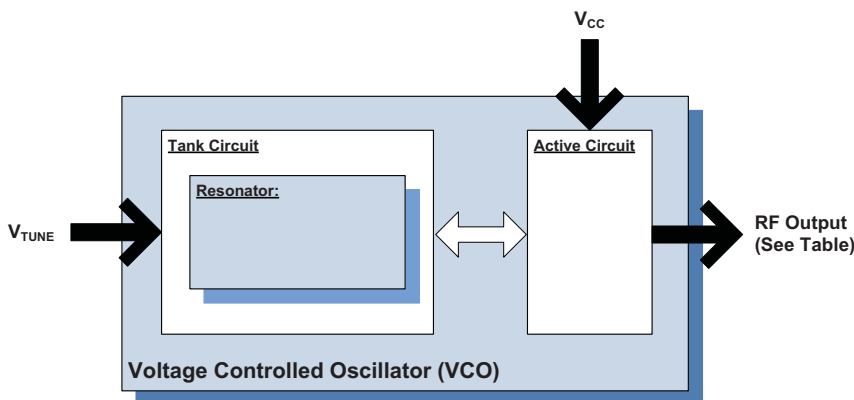


Package: T-Package, 12.7mm x 12.7mm x 3.96mm



Features

- Linear Tuning/Low Phase Noise
- Multiple Supply Voltage and Package Options Available
- Low-Cost/High-Volume Series
- Frequency: 950MHz to 2150MHz
- Resonator: Aircoil or Microstrip
- PCB: FR-4 and S1170
- Package Size: 12.7mm x 12.7mm x 3.96mm (0.5in x 0.5in x 0.156in)



Functional Block Diagram

Applications

- Wireless Infrastructure
- RFID
- General Wireless

Product Description

This series of wideband, low-cost, 12V VCO modules offers linear tuning across their specified frequency band.

Ordering Information

VC0793-1550TY Contact us at 1-480-756-6070

Optimum Technology Matching® Applied

- | | | | |
|--------------------------------------|--------------------------------------|--|------------------------------------|
| <input type="checkbox"/> GaAs HBT | <input type="checkbox"/> SiGe BiCMOS | <input type="checkbox"/> GaAs pHEMT | <input type="checkbox"/> GaN HEMT |
| <input type="checkbox"/> GaAs MESFET | <input type="checkbox"/> Si BiCMOS | <input type="checkbox"/> Si CMOS | <input type="checkbox"/> BiFET HBT |
| <input type="checkbox"/> InGaP HBT | <input type="checkbox"/> SiGe HBT | <input checked="" type="checkbox"/> Si BJT | <input type="checkbox"/> LDMOS |

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Absolute Maximum Ratings

Parameter	Rating	Unit
Operating Ambient Temperature	-40 to +85	°C
Storage Temperature	-55 to +125	°C



Caution! ESD sensitive device.

Exceeding any one or a combination of the Absolute Maximum Rating conditions may cause permanent damage to the device. Extended application of Absolute Maximum Rating conditions to the device may reduce device reliability. Specified typical performance or functional operation of the device under Absolute Maximum Rating conditions is not implied.

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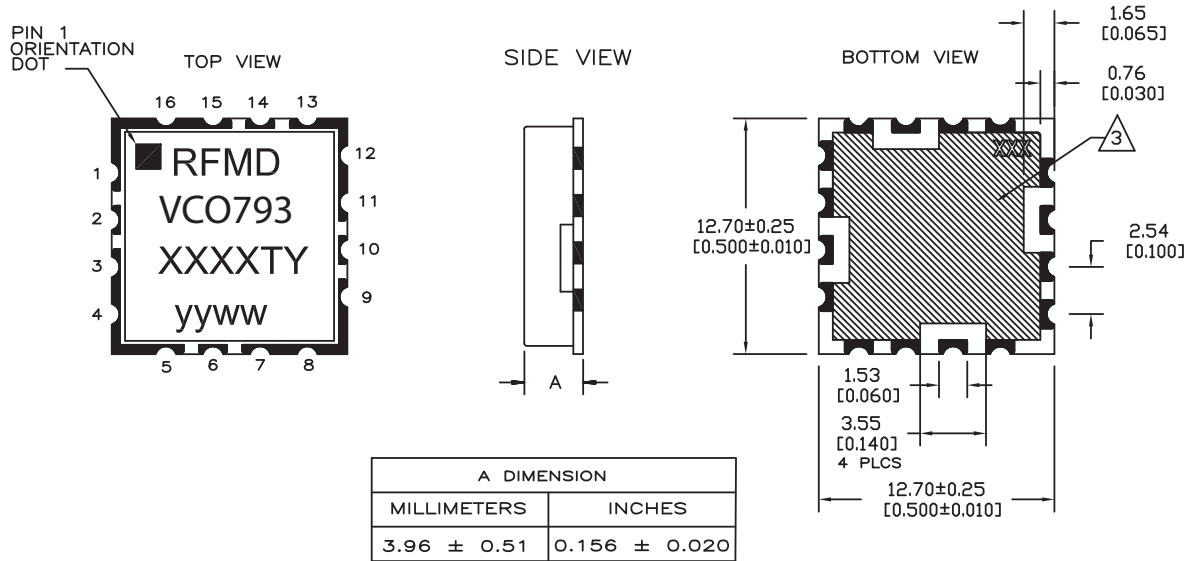


RoHS (Restriction of Hazardous Substances): Compliant per EU Directive 2002/95/EC.

Parameter	Specification			Unit	Condition
	Min.	Typ.	Max.		
Overall					
Frequency Range	950	1550	2150	MHz	
Tuning Voltage	0.5	1.2		V _{DC}	950MHz
		18	22	V _{DC}	2150MHz
Tuning Sensitivity	49	65	81	MHz/V	950MHz
	50	68	87	MHz/V	1150MHz
	50	68	87	MHz/V	1350MHz
	55	75	95	MHz/V	1550MHz
	52	72	92	MHz/V	1750MHz
	42	63	85	MHz/V	1950MHz
	30	50	70	MHz/V	2150MHz
Output Power	3	7	11	dBm	
Output Phase Noise		-98	-93	dBc/ Hz	10kHz
		-118	-113	dBc/ Hz	100kHz
Harmonic Suppression		-8	-4	dBc	2nd harmonic
		-18	-10	dBc	3rd harmonic
Spurious (Non-Harmonic)			-80	dBc	
Frequency Pushing		2.5	5	MHz p-p	11.5V to 12.5V
Frequency Pulling		7	10	MHz p-p	12dB RL
Tuning Port Capacitance		100		pF	
Output Impedance		50		Ω	
Power Supply					
Operating Voltage	11.5	12	12.5	V	
Supply Current		25	30	mA	

Package Drawing & Pin Outs

12.7mm x 12.7mm x 3.96mm (0.5in x 0.5in x 0.156in)



PIN OUT FOR VCO	
PIN	APPLICATION
2	Vt
6	MODULATION (OPT)
10	RF OUT
14	VCC

ALL OTHER PINS ARE GROUND

NOTE, UNLESS OTHERWISE SPECIFIED:

1. THE METAL CASE IS GROUND.
2. ALL HALF VIA CONTACTS ARE PLATED THRU FROM THE PAD ON THE TOP SIDE TO THE PAD ON THE BOTTOM SIDE OF THE BOARD.
3. HATCHED AREAS ARE GROUND AND ARE COVERED WITH LPI SOLDER MASK OVER BARE COPPER. ALL CONTACT AREAS ARE PLATED. SIGNAL VIAS MAY BE LOCATED WITHIN GROUND PLANE.
4. CROSS HATCHED AREA INDICATES AREA WHERE SOLDER MASK SHOULD BE APPLIED TO MOUNTING BOARD.
5. XXXX REPRESENTS THE MODEL NUMBER.
6. yyww IS THE DATE CODE.
7. Y AT THE END OF THE MODEL NUMBER DESIGNATES RoHS COMPLIANCE.
8. DIMENSIONS ARE IN MILLIMETERS AND [INCHES].