

# VCO

## Voltage Controlled Oscillator

### V101x Series

#### ➤ Features

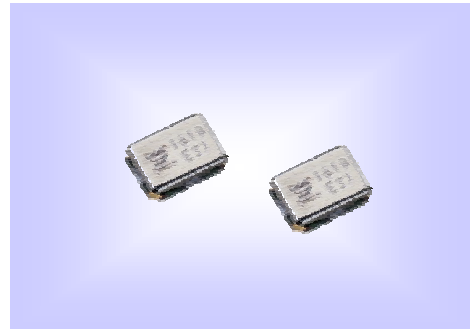
- Compact Single VCO  
( 4.5 x 3.2 x 1.5 mm max )

#### ➤ Applications

- For PHS , PDC , ...etc

#### ➤ Specifications

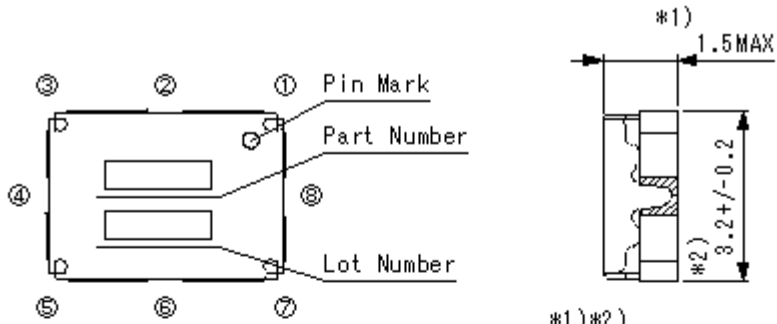
- P/N:V1011AZ1663



	Item	Unit	Low band
Current Consumption	V <sub>cc</sub> =2.8 V	mA	7.0 MAX
OSC Frequency	V <sub>t</sub> =0.5 V	MHz	1632 MAX
	V <sub>t</sub> =2.5 V	MHz	1692 MIN
Tuning Volt. Sensitivity		MHz/V	40 to 60
Output Power	V <sub>cc</sub> =2.8 V	dBm	- 6.0 to 0.0
Phase Noise	Offset=150kHz	dBc/Hz	-113 MAX
Harmonics	Up to 3 <sup>rd</sup>	dBc	-10 MAX
Pushing	V <sub>cc</sub> =+/-0.1V	kHz	+/-500 MAX
Pulling	VSWR=2 All phase	kHz	+/-600 MAX

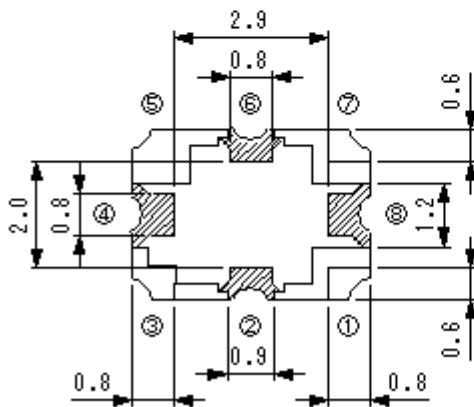
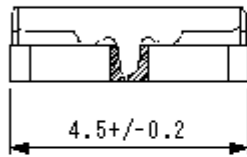
## Voltage Controlled Oscillator (VCO)

### External Dimensions



\*1)\*2)

This dimension does not include a solder.

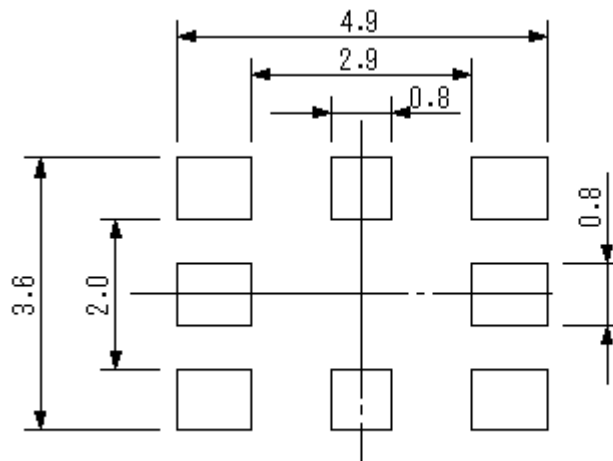


Pin Allocation	
①	Output
②	GND
③	GND
④	GND
⑤	Tuning Voltage(Vt)
⑥	GND
⑦	Supply Voltage(Vcc)
⑧	GND

Unit : mm

Note) The hatching of terminals are solder adhesion part.

### Recommended PCB Land Pattern

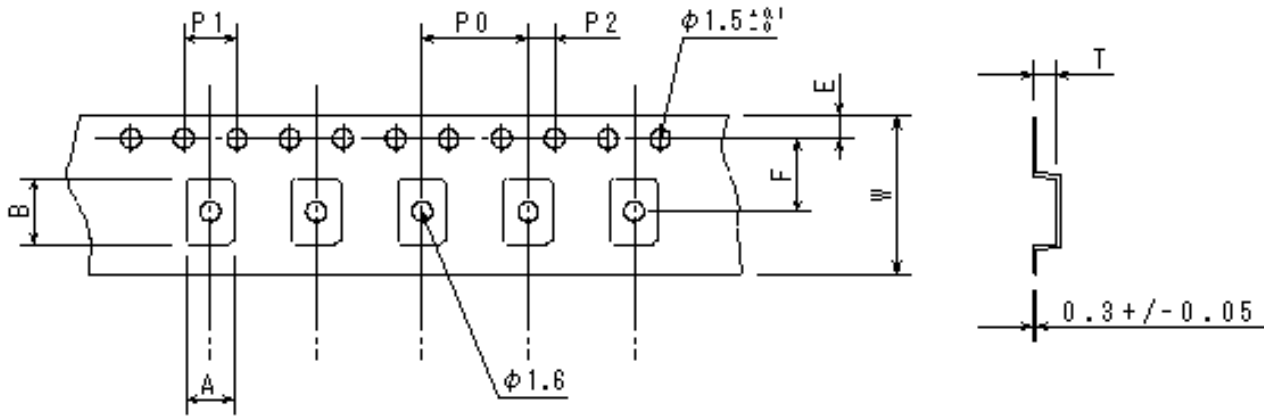


unit : mm

## Voltage Controlled Oscillator (VCO)

➤Tape Packing ( Packing unit: 4,000pcs/reel )

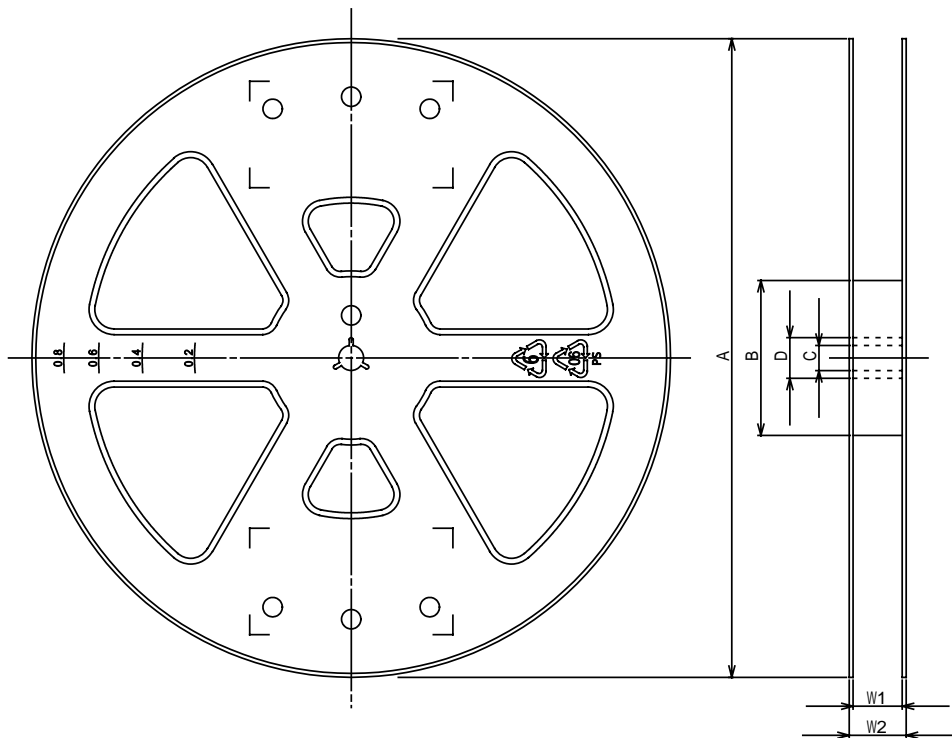
-Carrier Tape Configuration and Dimension



Unit:: mm

	A	B	W	F	E	P0	P1	P2	T
Dimensions	3.6	4.9	12.0	5.5	1.75	8.0	4.0	2.0	1.8
Tolerance	+/- 0.1	+/- 0.1	+/- 0.3	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1	+/- 0.1

- Reel Configuration and Dimension



Unit:: mm

	A	B	C	D	W1	W2
Dimensions	330.0	80.0	13.0	21.0	13.4	17.4
Tolerance	+/-2.0	+/-1.0	+/-0.2	+/-0.8	+/-1.0	+/-1.0

## Voltage Controlled Oscillator (VCO)

### ➤ Attention in use

The above products are designed, developed and manufactured as contemplated for general use, including without limitation, ordinary industrial use, general office use, personal use, and household use. But are not designed, developed and manufactured as contemplated (1) for use accompanying fatal risks or dangers that, unless extremely high safety is secured, could have a serious effect to the public, and could lead directly to death, personal injury, severe physical damage or other loss (i.e., nuclear reaction control in nuclear facility, aircraft flight control, air traffic control, mass transport control, medical life support system, missile launch control in weapon system), or (2) for use requiring extremely high reliability (i.e., submersible repeater and artificial satellite). You shall not use the above products for the above-mentioned uses. If your equipment is likely to be used for the above-mentioned uses, please consult with our sales representative before use. Fujitsu shall not be liable against you and/or any third party for any claims or damages arising in connection with the above-mentioned uses of the above products.

## FUJITSU MEDIA DEVICES LIMITED

<http://jp.fujitsu.com/fmd/en/>

### Japan Global Sales

Shin-Yokohama Square Bldg.,  
Shin-yokohama 2-3-12, Kohoku-ku, Yokohama,  
Kanagawa 222-0033, Japan  
Tel: +81-45-471-0061 Fax: +81-45-471-0076

### North and South America

FUJITSU MEDIA DEVICES OF AMERICA, INC.  
1250 East Arques Avenue, M/S 136  
Sunnyvale, CA 94085-3470, U.S.A.  
Tel: +1-408-746-7500  
Fax: +1-408-746-7555  
<http://www.fmda.fujitsu.com>

### Europe

FUJITSU MICROELECTRONICS EUROPE GmbH  
Pittlerstrasse 47, 63225 Langen,  
Germany  
Tel: +49-6103-690-0  
Fax: +49-6103-690-122  
<http://www.fme.fujitsu.com/>

### Asia Pacific

FUJITSU MEDIA DEVICES HONG KONG Ltd.  
Suite 2012, Tower 1 The Gateway,  
25 Canton Road,  
Tsim Sha Tsui, Kowloon, Hong Kong  
Tel: +852-2866-8509  
Fax: +852-2866-8287

### FUJITSU MEDIA DEVICES HONG KONG LTD.

(Taiwan representative office)  
19F, No.39, Section 1, Chung hwa Road, Taipei  
Taiwan R.O.C.  
Tel: +886-2-2311-2255  
Fax: +886-2-2371-8347

### FUJITSU MEDIA DEVICES TRADING(SHANGHAI) Ltd.

Room 3104,  
Bund Center 222 Yan An Road East,  
Shanghai 200002 China  
Tel: +86-21-6323-4560  
Fax: +86-21-6323-4510

The contents of this document are subject to change without notice.

Customers are advised to consult with FUJITSU MEDIA DEVICES sales representatives before ordering.

The information and circuit diagrams in this document are presented as examples of device applications, and are not intended to be incorporated in devices for actual use. Also, FUJITSU MEDIA DEVICES is unable to assume responsibility for infringement of any patent rights or other rights of third parties arising from the use of this information or circuit diagrams.

The products described in this document are designed, and manufactured as contemplated for general use, including without limitation, ordinary industrial use, general office use, personal use, and household use, but are not designed, developed and manufactured as contemplated (1) for use accompanying fatal risks or dangers that, unless extremely high safety is secured, could have a serious effect to the public, and could lead directly to death, personal injury, severe physical damage or other loss (i.e., nuclear reaction control in nuclear facility, aircraft flight control, air traffic control, mass transport control, medical life support system, missile launch control in weapon system), or (2) for use requiring extremely high reliability (i.e., submersible repeater and artificial satellite).

Please note that Fujitsu will not be liable against you and/or any third party for any claims or damages arising in connection with above-mentioned uses of the products.

Any electronic devices have inherently certain rate of failure. You must protect against injury, damage or loss from such failures by incorporating safety design measures into your facility and equipment such as redundancy, fire protection, and prevention of over-current levels and other abnormal operating conditions.

If any products described in this document represent goods or technologies subject to certain restrictions on export under the Foreign Exchange and Foreign Trade Control Law of Japan, the prior authorization by Japanese government should be required for export of those products from Japan.