Model VCP3028X
Frequency Translator



Features:

- 155.52 MHz SAW-based LVPECL output
- RoHS Compliant
- Low Profile Surface Mount Package
- Excellent solder reflow performance
- PCB Substrate for excellent TCE match
- Non-peaking attenuation Response

Description and applications:

Surface mount 15.9 mm SQ frequency translator operating at a 3.3V supply with complementary LVPECL outputs for use in telecom & datacom

- See WWW.CTSCORP.COM for product patent status.

Electrical Specifications:

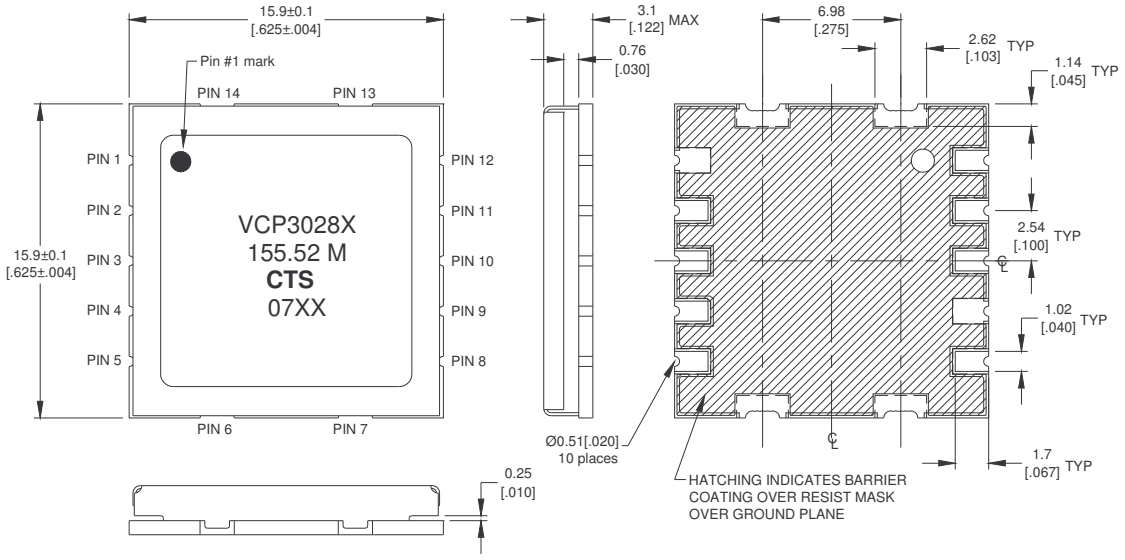
VCP3028X	Specification
Input frequency	77.76 MHz
Output frequency	155.52 MHz
Supply Voltage (± 5%)	3.3V
PECL input	400 mV min. peak-to-peak
PECL output	Min. Max. Logic "0" 1.49V 1.68V Logic "1" 2.28V 2.42V
Output Duty Cycle	45/55% max
Current Drain	95 mA max.
Operating Temperature	-40 to 85°C
Input frequency tracking capability	+/- 32 ppm minimum
Jitter attenuation	> 3 dB @ 400 Hz offset > 6 dB @ 1 kHz offset
Peaking	<0.1 dB
RMS phase jitter generation (12 kHz to 50 MHz)	<1 psec max.

CTS Electronic Components, Inc. 171 Covington Dr. Bloomingdale, Illinois 60108
http://www.ctscorp.com/

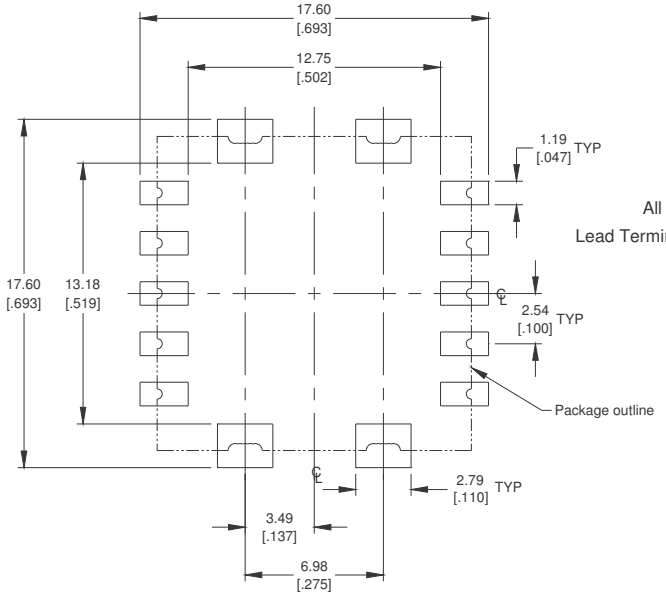
VCP3028X

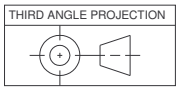
Mechanical Dimensions (mm):

15.9mm x 15.9mm x 3.1 mm (max.):



Recommended Land Pattern





All dimensions are in MM [Inches].
All dimensions are nominal unless otherwise specified.
Lead Termination Finish: Gold Flash, <10 micro inch, over Ni plated Cu.

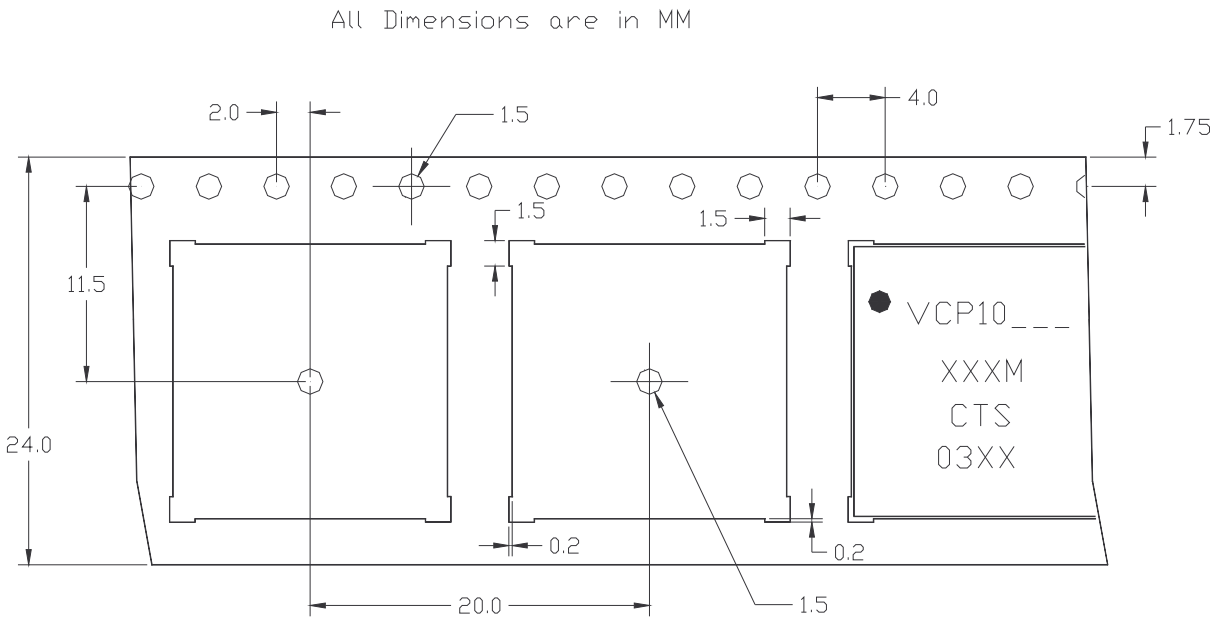
CTS Electronic Components, Inc. 171 Covington Dr. Bloomingdale, Illinois 60108
http://www.ctscorp.com/

PIN OUT

Pin	Symbol	Function
1	LD	Lock detect Logic “1” indicates a locked condition (CMOS level ≥Vdd-.04) Logic “0” indicates that no input signal is present or the input signal has moved out of the lock range (CMOS Level ≤0.4V)
2	IN	Input frequency
3	/IN	NC: not connected internally
4	GND	Ground
5	E/D	Enable/ disable Logic “0” = output disabled (CMOS Level ≤0.4V) Logic “1” = output enabled (CMOS Level ≥ Vdd-0.4 V)
6	Gnd	Ground
7	Gnd	Ground
8	/OUT	Complementary output
9	OUT	Output
10	Vcc	Power supply voltage
11	N/C	No connection
12	Gnd	Ground
13	Gnd	Ground
14	Gnd	Ground

Tape & Reel Information

Tape width 24 mm, pitch 20 mm, as per EIA 481-2, 1000 units per reel max



Environmental Limits:

Storage Temperature	**-40 to +90 °C.**
Humidity	**95% Relative humidity max @ 70°C.**
Vibration	**10 to 60 Hz with double amplitude of 1.52mm max. (1/2 hour in each of 3 perpendicular planes).**
Mechanical Shock	**1/2 sine pulse, 3000G, with pulse width 0.3mSec. (3 shock in each of 6 directions of 3 perpendicular planes).**

Solder Reflow Conditions

Device is capable of withstanding reflow of 260 degrees C for 10 seconds maximum.

Moisture Sensitivity: **MSL 1**

RoHS: **This device is fully compliant to RoHS Directive 2002/95/EC.**

CTS Electronic Components, Inc. 171 Covington Dr. Bloomingdale, Illinois 60108
http://www.ctscorp.com/