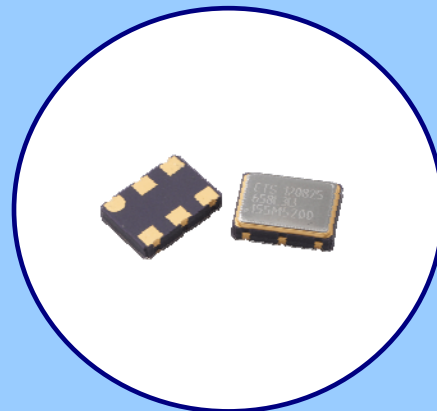


FEATURES

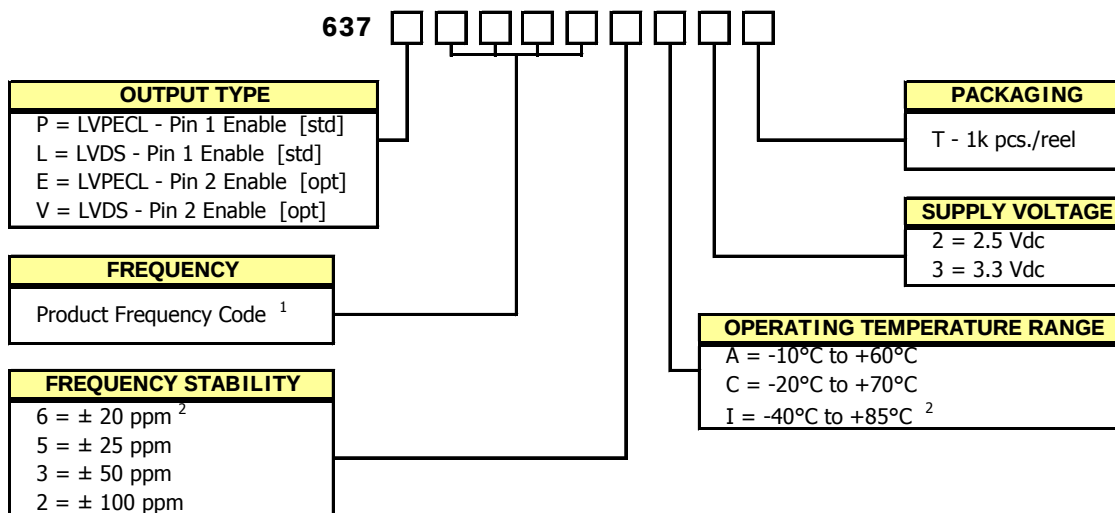
- Standard 7.0mm x 5.0mm, 6-Pad Surface Mount Package
- **Low Phase Jitter, 0.5ps RMS Maximum**
- LVPECL or LVDS Output
- Fundamental and 3rd Overtone Crystal Designs
- Frequency Range 19.44 – 320 MHz
- Frequency Stability ± 50 ppm Standard
- Operating Voltages +2.5Vdc or +3.3Vdc
- Operating Temperature to -40°C to +85°C
- Output Enable Standard
- Tape & Reel Packaging Standard, EIA-418
- **RoHS/Green Compliant [6/6]**



APPLICATIONS

Model 637 is ideal for applications such as broadband access, SerDes, Ethernet/Gigabit Ethernet, SONET/SDH and optical networking.

ORDERING INFORMATION



1] Refer to document 016-1454-0, Frequency Code Tables.

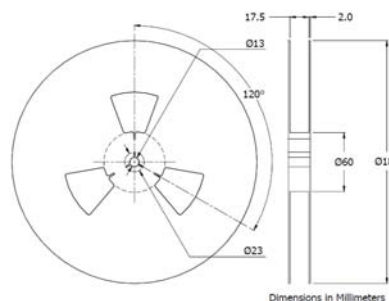
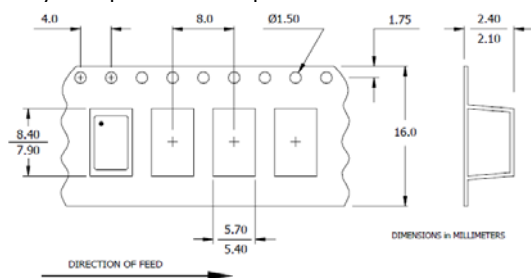
3-digits required for frequencies below 100MHz and 4-digits for frequencies 100MHz or greater.

2] Consult factory for availability of 6I Stability/Temperature combination.

Not all performance combinations and frequencies may be available.
Contact your local CTS Representative or CTS Customer Service for availability.

PACKAGING INFORMATION [reference]

Device quantity is 1k pcs. maximum per 180mm reel.



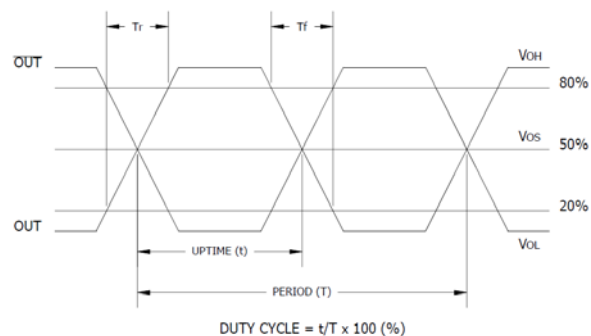
ELECTRICAL CHARACTERISTICS

ELECTRICAL PARAMETERS	PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
	Maximum Supply Voltage	V_{CC}	-	-0.5	-	5.0	V
	Storage Temperature	T_{STG}	-	-40	-	+100	°C
	Frequency Range	f_0	-	19.44	-	320	MHz
				80.00	-	320	
	Frequency Stability	$\Delta f/f_0$	All Inclusive, see Note 1.	-	-	20, 25, 50, 100	± ppm
			1st year aging	-	-	3	
	Operating Temperature	T_A	-	-20	25	+70	°C
				-40		+85	
	Supply Voltage	V_{CC}	± 5 %	2.38	2.5	2.63	V
				3.14	3.3	3.47	
	Supply Current	I_{CC}	Maximum Load	-	-	88	mA
				-	-	65	
	Start Up Time	T_S	Application of V_{CC}	-	2	5	ms
	Phase Jitter	t_{jrms}	Bandwidth 12 kHz - 20 MHz	-	0.3	0.5	ps
	Period Jitter RMS	p_{jrms}	-	-	2.1	-	
	Period Jitter Pk-Pk		-	-	22	-	
	Enable Function		Standby				V
	Enable Input Voltage	V_{IH}	Pin 1 or 2 Logic '1', Output Enabled	$0.7 \cdot V_{CC}$	-	-	
	Disable Input Voltage	V_{IL}	Pin 1 or 2 Logic '0', Output Disabled	-	-	$0.3 \cdot V_{CC}$	
	Disable Time	T_{PLZ}	Pin 1 or 2 Logic '0', Output Disabled	-	-	200	ns
	Enable Time	T_{PLZ}	Pin 1 or 2 Logic '1', Output Enabled	-	-	2	ms
	LVPECL WAVEFORM						
	Output Load	R_L	Terminated to $V_{CC} - 2.0V$	-	50	-	Ohms
	Output Duty Cycle	SYM	@ $V_{CC} - 1.3V$	45	-	55	%
	Output Voltage Levels	V_{OH}	PECL Load, -20°C to +70°C	$V_{CC} - 1.025$	-	$V_{CC} - 0.880$	V
		V_{OL}	PECL Load, -20°C to +70°C	$V_{CC} - 1.810$	-	$V_{CC} - 1.620$	
	Output Voltage Levels	V_{OH}	PECL Load, -40°C to +85°C	$V_{CC} - 1.085$	-	$V_{CC} - 0.880$	V
		V_{OL}	PECL Load, -40°C to +85°C	$V_{CC} - 1.830$	-	$V_{CC} - 1.555$	
	Rise and Fall Time	T_R, T_F	@ 20% - 80% Levels	-	0.3	0.7	ns
	LVDS WAVEFORM						
	Output Load	R_L	Between Outputs	-	100	-	Ohms
	Output Duty Cycle	SYM	@ 1.25V	45	-	55	%
	Differential Output Voltage	V_{OD}	$R_L = 100$ Ohms	247	350	454	mV
	Offset Voltage	V_{OS}	LVDS Load	1.125	1.25	1.375	V
	Output Voltage Levels	V_{OH}	LVDS Load	-	1.43	1.6	V
		V_{OL}	LVDS Load	0.9	1.1	-	
	Rise and Fall Time	T_R, T_F	@ 20% - 80% Levels	-	0.4	0.7	ns

Notes:

1. Inclusive of initial tolerance at time of shipment, changes in supply voltage, load, temperature and 1st year aging.

LVPECL/LVDS OUTPUT WAVEFORM

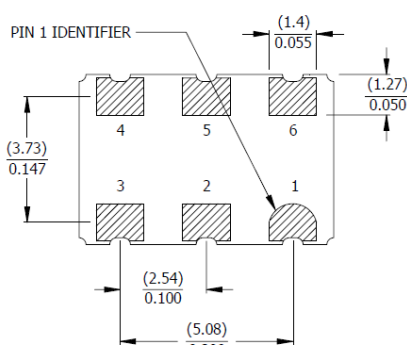


ENABLE TRUTH TABLE

PIN 1 or Pin 2	PIN 4 & 5
Logic '1'	Output
Open	Output
Logic '0'	High Z

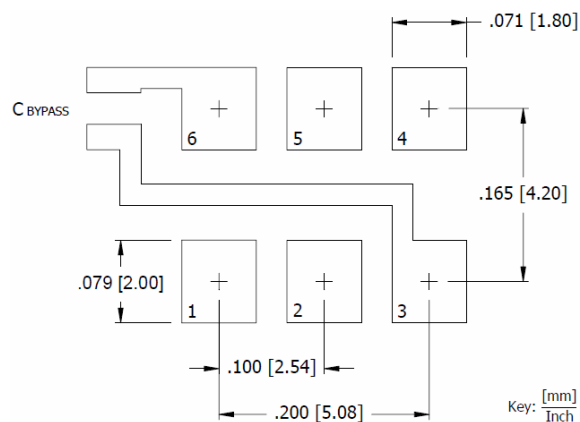
Figure 1: Block diagram of the test circuit. The circuit includes a POWER SUPPLY connected to a mA meter and a VM meter. A 0.01uF capacitor is connected in parallel with the VM meter. The D.U.T. (Device Under Test) is connected to the output of the VM meter. The D.U.T. has pins 1, 2, 3, 4, 5, and 6. Pins 1 and 2 are connected to ground. Pins 3 and 4 are connected to a load resistor R_L (100 Ω) which is connected to CH1. Pin 5 is connected to CH2. Pin 6 is connected to the output of the VM meter. The output of the VM meter is also connected to the output of the mA meter.

The drawing shows the mechanical specifications of the CTS6370STV package. The top view is a rectangle with a width of 7.0 ± 0.2 mm and a length of 0.276 ± 0.008 mm. The package is labeled with "CTS**YYWW", "6370STV", and "• xxxx". The side view shows a thickness of 5.0 ± 0.2 mm and a mounting height of 0.197 ± 0.008 mm. A detail view of the mounting pads shows a thickness of 2.0 mm and a width of 0.079 mm.



Key: $\frac{(\text{mm})}{\text{Inch}}$

C_{BYPASS} should be $\geq 0.01 \mu\text{F}$.



1. ** - Manufacturing Site Code.
2. YYWW – Date code, YY – year, WW – week.
3. O – Output Type. P or E = LVPECL, L or V = LVDS.
4. ST – Frequency stability/temperature code.
[Refer to Ordering Information.]
5. V – Voltage code. 3 = 3.3V, 2 = 2.5V
6. xxxx – Frequency Code.
3-digits, frequencies below 100MHz
4-digits, frequencies 100MHz or greater.

Refer to document 016-1454-0, Frequency Code Tables.

1. Complete CTS part number, frequency value and date code information must appear on reel and carton labels.
2. Termination pads [e4]. Barrier-plating is nickel [Ni] with gold [Au] flash plate.
3. Reflow conditions per JEDEC J-STD-020; 260°C maximum, 20 seconds.
4. MSL = 1.

PIN FUNCTION ASSIGNMENTS		
PIN	SYMBOL	DESCRIPTION
1	EOH or N.C.	Enable [std] or No Connect
2	N.C. or EOH	No Connect or Enable [opt]
3	GND	Circuit & Package Ground
4	Output	RF Output
5	Output	Complimentary RF Output
6	V _{CC}	Supply Voltage

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: org@lifeelectronics.ru

www.lifeelectronics.ru