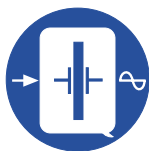


10150 West Jefferson Boulevard
Culver City, CA 90232



Tel: 310.836.7900

Fax: 310.836.2157

Email: sales@q-tech.com

www.q-tech.com



(product catalog)

Please visit our web site at
www.q-tech.com
for additional information
and the latest updates on
this product line.

**Meeting high shock
and vibration
requirements!**

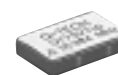
High-Reliability Surface Mount Crystal Oscillators



Small Size!



actual size, .550 x .350
(13.97 x 8.89)



Pictured-
QT75V,
VCXO -
with out J leads

Voltage Controlled
Surface Mount Oscillators.
Please consult the factory.

Now offering a wide range
of VCOs and VCXOs in these
same package styles.

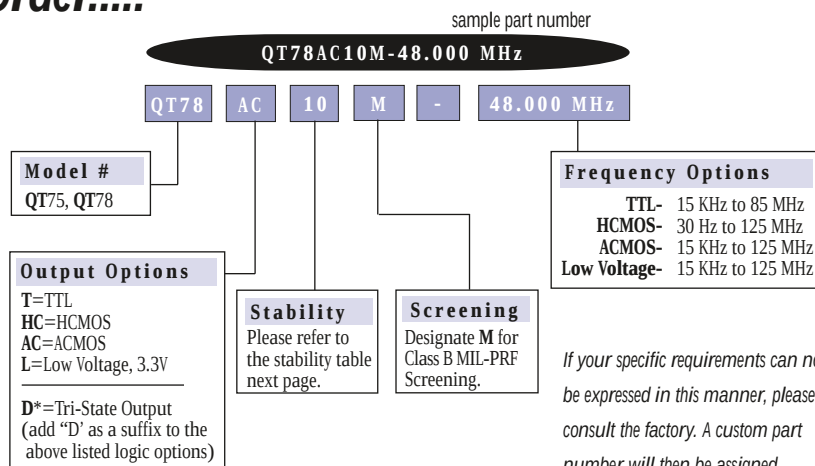
Features.....

- CMOS and TTL Drive Capability
- Wide Temperature Range Availability
- Wide Frequency Range, now to 125 MHz
- Industry Standard Surface Mount Package
- Vapor Phase and Infrared Reflow Compatible
- Industry Standard Supply Voltages, 5V & 3.3V
- High-Performance Under Severe Environmental Conditions

MIL-PRF-55310 Equivalency Table

Model#	MIL. Equiv.	MIL. Frequency Range
QT78TD	/28	1.000 to 85.000 MHz
QT78HCD	/27	1.000 to 85.000 MHz

How to Order.....

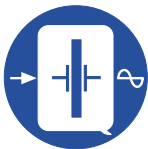




w/o J leads

with J leads

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Applications.....

All Military Ruggedized Aps.

Commercial Aircraft

Cellular Base Stations

PCS Base Stations

Test Equipment

Synthesizers

Avionics

Pin Connections

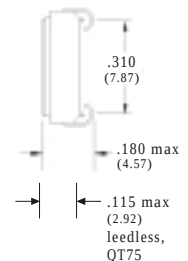
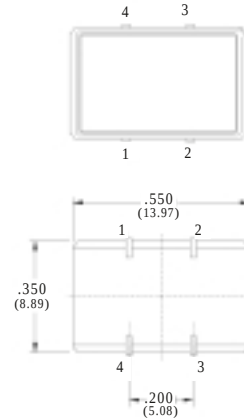
Pin #	Function
1	Enable (optional)*
2	Ground
3	Output
4	Vcc

*Optional Enable Function

Enable Control	Output
Logic "1"	Enabled
Logic "0"	Disabled
	(high impedance)

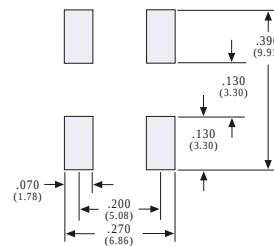
Options.....

- Low Phase Jitter
- Tri-State Output
- Low Current Designs
- Screening per MIL-PRF-55310 level B
- Various Lead and Pad Configurations
- Voltage Controlled (request data sheet)
- Solder Dipped Leads / Solderability Testing
- Temperature Sensor (consult the factory)



Package
Outline
Drawing

Suggested PCB Footprint



Temperature Vs. Stability Options

Code	+/-PPM	Temp.°C
1	100	0 to +70
3*	5	0 to +50
4	50	0 to +70
5	25	-20 to +70
6	50	-55 to +105
9	50	-55 to +125
10	100	-55 to +125
11	50	-45 to +85
12	100	-45 to +85

*requires external tuning, consult the factory

Electrical Specifications.....

	TTL	HCMOS	ACMOS	Low Voltage
Frequency Range:	15 KHz to 85 MHz	30 Hz to 125 MHz	15 KHz to 125 MHz	15 KHz to 125 MHz
Temperature Stability:	See Table	See Table	See Table	See Table
Supply Voltage:	+5.0V +/-10%	+5.0V +/-10%	+5.0V +/-10%	+3.3V +/-10%
Symmetry (max.):	(@ 1.4V)	(@ 1/2 VCC)	(@ 1/2 VCC)	(@ 1/2 VCC)
30 Hz to 15 KHz	n/a	45/55%	n/a	n/a
15 KHz to 15 MHz	45/55%	45/55%	45/55%	45/55%
15 MHz to 85 MHz	40/60%	45/55%	45/55%	45/55%
85 MHz to 100 MHz	n/a	40/60%	40/60%	40/60%
100 MHz to 125 MHz	n/a	40/60%	40/60%	40/60%
Supply Current (max.):	no load condition-			
30 Hz to 15 KHz	n/a	20 mA	n/a	n/a
15 KHz to 15 MHz	10 mA	20 mA	20 mA	6 mA
5 MHz to 30 MHz	15 mA	15 mA	15 mA	7 mA
30 MHz to 60 MHz	25 mA	35 mA	35 mA	12 mA
60 MHz to 85 MHz	40 mA	45 mA	45 mA	30 mA
85 MHz to 100 MHz	n/a	45 mA	45 mA	30 mA
100 MHz to 125 MHz	n/a	55 mA	55 mA	30 mA
Rise Time / Fall Times (max.):				
30 Hz to 30 MHz	5/5 nS	10/10 nS	3/3 nS	3/3 nS
30 MHz to 85 MHz	3/3 nS	5/5 nS	3/3 nS	3/3 nS
85 MHz to 100 MHz	n/a	5/5 nS	3/3 nS	3/3 nS
100 MHz to 125 MHz	n/a	3/3 nS	3/3 nS	3/3 nS
Load:	10 TTL, < 85 MHz 6 TTL, > 85 MHz	10K Ohm +15 pF	15 pF	15 pF