



**Q-Tech Corporation**

*The World's Leading Manufacturer of High Reliability Hybrid Crystal Oscillators*

TEL: 310-836-7900

FAX: 310-836-2157

[Corporate Profile](#)

[Products](#)

[Contact Us](#)

[RFQ](#)

[Jobs/News](#)

[Search](#)

[Home](#)

**Model : QT3**

**Type: Transistor Outline Crystal Oscillator**

[Show Dimensions >>](#)



### Pin Configuration

VCC	GND	OUT	CASE	ITP
8	4	5	4	2, 6, 7

### Equivalent Military Designation:

M55310/10 = QT3T, /13 = QT3C

[Freq. Designation >>](#)

### Frequency Options

TTL	400 Hz to 64 MHz
CMOS **	0.01 Hz to 15 MHz (5 to 15 V)
HCMOS/ACMOS	0.03 Hz to 60 MHz
** Indicate supply voltage : QT3C9M-16.000 MHZ, 15 V	

### Frequency Stability vs Temperature

Code	± %	± PPM	Temp
1	.01	100	0°C to +70°C
4	.005	50	0°C to +70°C
3**	.0005	5	0°C to +50°C
5	.0025	25	-20°C to +70°C
6	.005	50	-55°C to +105°C
9	.005	50	-55°C to +125°C
10	.01	100	-55°C to +125°C
11	.005	50	-40°C to +85°C
12	.01	100	-40°C to +85°C

\*\* Requires external tuning capacitors. Consult the factory for pin connections. For frequencies above 30 MHz, consult the factory. For frequency stability vs. temperature options not listed herein, request a custom part number.

Screened

[Output Logic](#)

Phase Noise

Factory Options

### Output Logic

<b>T</b>	TTL
<b>C</b>	CMOS
<b>HC</b>	High Speed CMOS
<b>AC</b>	Advanced CMOS
<b>L</b>	Low Voltage, 3.3 V
<b>Z</b>	Special CMOS*
<b>D</b> = Tristate Output (add "D" as a suffix to the above listed options)	

\* Output logic can drive up to 200 pF load with typical 6 ns rise & fall time (tr, tf).

## Electrical Specifications

ITEM	TTL	CMOS	HC/ACMOS***
<b>SUPPLY VOLTAGE</b>	5 V ± 10%	5.0 TO 15.0 V	5 V ± 10%**
<b>SUPPLY CURRENT (Typical)</b>	66 to 80 MHz: 60 mA 50 to 66 MHz: 40 mA 27 to 50 MHz: 25 mA 6.5 to 27 MHz: 12 mA .01 Hz to 6.5 MHz: 20 mA	2 to 4 mA @ 5V and 6 MHz  Special supply voltage or current available. Ultra low current for battery operation also available.	HC = 6 mA @ 10 MHz AC = 20 mA @ 35 MHz Special supply voltage or current available. Ultra low current for battery operation also available.
<b>LOAD</b>	> 30 MHz: 6 TTL < 30 MHz: 10 TTL	Typical 10 k ohm shunted with 15 pf. capacitor	Typical ± 2 mA drive. Can drive 1 TTL load.
<b>SYMMETRY*</b>	≥ 8 MHz: 60/40% < 8 MHz: 45/55%	4 to 15 MHz: 60/40% < 4 MHz: 45/55%	≥ 10 MHz: 60/40% < 10 MHz: 45/55%

\* Optional symmetry selections are 45/55 or 47.5/52.5 Custom symmetry is also available upon request.

\*\* Parts are available with supply range of 2.5 to 6 Volts.

\*\*\* Low voltage logic available, Vcc = 3.3 V ± 10%, Current = 12 mA @ 40 MHz, Drive capability = 15 pf

### Ordering Information

Example **QT6VHC9M - 20.000 MHz**

