

ISSUE 14; September 2019

Description

- Standard 7 x 5mm crystal oscillator in a ceramic package with a seam sealed metal lid, hermetically sealed.
- Stock parts are available.
- Fast Make capability: CFPP-73 series programmable oscillators are the nearest equivalent fast make model.

Frequency Parameters

- Frequency: 500.0kHz to 157.0MHz
- Frequency Stability: $\pm 20.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Ageing: $\pm 3\text{ppm}$ per year max

Electrical Parameters

- Supply Voltage: 3.3V $\pm 10\%$
- Note: parameters are referenced to 15pF load

Operating Temperature Ranges

- 0 to 70°C
- 40 to 85°C

Output Details

- Output Compatibility: HCMOS
- Start up time: 10ms max.
0.9ms typ to 90% of final amplitude (under ideal conditions @ 25°C)

Drive Capability	
0.5MHz to 50.0MHz	15pF std, 50pF max
50.0MHz to 80.0MHz	15pF std, 30pF max
80.0MHz to 157.0MHz	15pF max

Output Control

- Standby Operation:
Logic '1' (>70% VS) to pad 1 enables oscillator output
Logic '0' (<30% VS) to pad 1 disables oscillator output; the oscillator output goes to the high impedance state
No connection to pad 1 enables oscillator output
Standby Current: 10 μ A max, 0.9 μ A typ @ 25°C

Noise Parameters

- Phase Noise @125MHz (typical):
10Hz -54dBc
100Hz -92dBc
1kHz -130dBc
10kHz -149dBc
100kHz -159dBc
1MHz -163dBc
- RMS Phase Jitter @125MHz: 52fs typical

Environmental Parameters

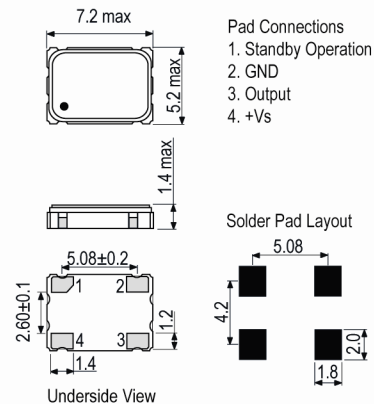
- Shock: MIL-STD-202, Method 213, Condition E
- Vibration: MIL-STD-883, Method 2007, Condition A
- Storage Temperature Range: -55 to 125°C

Manufacturing Details

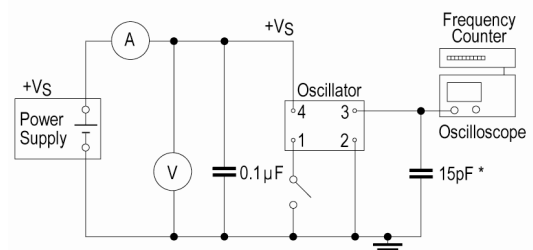
- RoHS Terminations: NiAu
- RoHS Reflow: 260degC 10s



Outline (mm)



Test Circuit



* Inclusive of jigging and equipment capacitance

Sales Office Contact Details:

UK: +44 (0)1460 270200
Germany: 0800 1808 443

France: 0800 901 383
USA: +1.760.318.2824

Email: info@iqdfrequencyproducts.com
Web: www.iqdfrequencyproducts.com

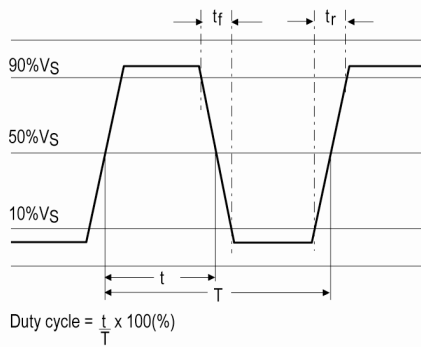
Compliance

- RoHS Status (2011/65/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

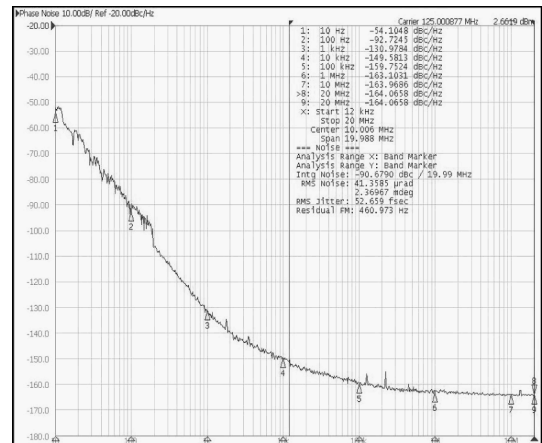
Packaging Details

- Pack Style: Cutt In tape, cut from a reel
Pack Size: 100
- Pack Style: Reel Tape & reel in accordance with EIA-481-D
Pack Size: 1,000

Wave Form



Phase Noise / Jitter



Electrical Specification - maximum limiting values @ 15pF and 3.3V ±10%

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
500.0kHz	19.999999MHz	0 to 70	±20.0	7	10	45/55
		-40 to 85	±25.0	7	10	45/55
20.0MHz	31.999999MHz	0 to 70	±20.0	12	10	45/55
		-40 to 85	±25.0	12	10	45/55
32.0MHz	49.999999MHz	0 to 70	±20.0	20	10	45/55
		-40 to 85	±25.0	20	10	45/55
50.0MHz	79.999999MHz	0 to 70	±20.0	25	8	45/55
		-40 to 85	±25.0	25	8	45/55
80.0MHz	99.999999MHz	0 to 70	±20.0	30	5	45/55
		-40 to 85	±25.0	30	5	45/55
100.0MHz	157.0MHz	0 to 70	±20.0	40	4	45/55
		-40 to 85	±25.0	40	4	45/55

This document was correct at the time of printing; please contact your local sales office for the latest version.
[Click to view latest version on our website.](#)

Sales Office Contact Details:

UK: +44 (0)1460 270200
 Germany: 0800 1808 443

France: 0800 901 383
 USA: +1.760.318.2824

Email: info@iqdfrequencyproducts.com
 Web: www.iqdfrequencyproducts.com

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Standard Clock Oscillators](#) category:

Click to view products by [IQD](#) manufacturer:

Other Similar products are found below :

[601252](#) [F335-25](#) [F535L-33.333](#) [F535L-50](#) [ECS-2018-160-BN-TR](#) [MXO45HS-2C-66.6666MHZ](#) [SiT1602BI-22-33E-50.000000E](#) [SiT8209AI-32-33E-125.000000](#) [SIT8918AA-11-33S-50.000000G](#) [SM4420TEV-40.0M-T1K](#) [F335-24](#) [F335-40](#) [F535L-10](#) [F535L-12](#) [F535L-16](#) [F535L-24](#) [F535L-27](#) [F535L-48](#) [PE7744DW-100.0M](#) [CSX-750FCC14745600T](#) [ASF1-3.686MHZ-N-K-S](#) [XO57CTECNA3M6864](#) [ECS-2100A-147.4](#) [601251](#) [EP16E7E2H26.000MTR](#) [SIT8918AA-11-33S-16.000000G](#) [XO3003](#) [9120AC-2D2-33E212.500000](#) [9102AI-243N25E100.00000](#) [8208AC-82-18E-25.00000](#) [ASDK2-32.768KHZ-LR-T3](#) [8008AI-72-XXE-24.545454E](#) [8004AC-13-33E-133.33000X](#) [AS-4.9152-16-SMD-TR](#) [ASFL1-48.000MHZ-LC-T](#) [SIT8920AM-31-33E-25.0000](#) [DSC1028DI2-019.2000](#) [9121AC-2C3-25E100.00000](#) [9102AI-233N33E100.00000X](#) [9102AI-233N25E200.00000](#) [9102AI-232H25S125.00000](#) [9102AI-133N25E200.00000](#) [9102AC-283N25E200.00000](#) [9001AC-33-33E1-30.000](#) [3921AI-2CF-33NZ125.000000](#) [5730-1SF](#) [PXA000010](#) [8003AI-12-33S-40.00000Y](#) [1602BI-13-33S-19.200000E](#) [8208AI-2F-18E-25.000000X](#)