

Customer Part:

Description

- Zarlink approved TCXO for GR-1244 & GR-253 Stratum 3 applications.
- Model E3179LF
- Model Issue number 7

Frequency Parameters

- Frequency 20.0MHz
- Frequency Stability ± 0.32 ppm
- Operating Temperature Range -5.00 to 80.00°C
- Ageing ± 4.6 ppm max after 20 years
- Holdover Stability [$\pm(F_{max}-F_{min})/2F_0$]:
Temperature, -5 to 80°C, inclusive of Supply Voltage: 3.3V $\pm 5\%$ and Ageing, 24 hours: $< \pm 0.32$ ppm
- Free-Run Accuracy, incl.
Calibration @25°C, Temperature -5 to 80°C, Supply Voltage 3.3V $\pm 5\%$, Load 15pF $\pm 5\%$, Reflow Soldering and Ageing 20 years: $< \pm 4.6$ ppm ref. to Follow

Electrical Parameters

- Supply Voltage 3.3V $\pm 5\%$
- Current Draw 6.000mA

Output Details

- Output Compatibility HCMOS
- Drive Capability 15pF max
- Rise and Fall Time 9.0ns max
- Duty Cycle 45/55%

Output Control

- Tri-State Operation:
Logic '1' ($\geq 60\%V_S$) to pad 8 enables output
Logic '0' ($\leq 20\%V_S$) to pad 8 disables output
When at logic '0' the output stage is disabled for all output options, but the oscillator and compensation circuit are still active (Current consumption < 1 mA)

Output Levels

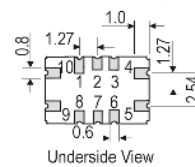
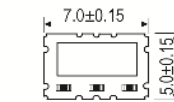
- VOL: $\leq 10\% V_S$
- VOH: $\geq 90\% V_S$

Noise Parameters

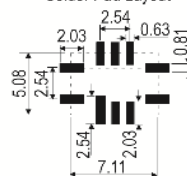
- Phase Noise (max):
-85dBc/Hz @ 10Hz
-110dBc/Hz @ 100Hz
-120dBc/Hz @ 1kHz
-135dBc/Hz @ 10kHz

Environmental Parameters

- Storage Temperature: -55 to 125°C
- Shock: IEC 60068-2-27, Test Ea: 980m/s² acceleration for 6ms, 3 shocks in each of 3 mutually perpendicular planes
- Vibration: IEC 60068-2-6, Test Fc, Procedure B4: 10Hz-60Hz 1.5mm displacement, 60-2000Hz at 98.1m/s², 30mins in 3 mutually perpendicular planes at 1 oct/min
- Solderability: MIL-STD-202, Method 208, Category 3


Outline (mm)

Pad Connections

1. Do not connect
 2. N/C
 3. Do not connect
 4. GND
 5. Output
 - 6 & 7. N/C
 8. Tri-state Control *
 9. +V_S
 10. Do not connect
- * Leave unconnected if not required

Solder Pad Layout

Sales Office Contact Details:

UK: +44 (0)1460 270200

USA: +1.760 668 8935

 Email: info@iqdfrequencyproducts.com

 Web: www.iqdfrequencyproducts.com

Customer Part:**Manufacturing Details**

- Resistance to Soldering Heat: 260°C, 60sec max above 220°C
- RoHS Terminations NiCoAu
- RoHS Reflow Temp 260degC 30s

Compliance

- RoHS Status (2015/863/EU) Compliant
- REACh Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

Packaging Details

- Pack Style: Bulk Loose in bulk pack
 Pack Size: 10
- *Alternative packing option available*

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