

ISSUE 1; July 2024

### Description

- Ceramic package with a hermetically seam sealed metal lid suitable for automotive applications. Qualified to AEC-Q200 Rev D and with IATF-16949:2016 release. Not suitable for safety critical applications.



### Frequency Parameters

- Frequency: 2.0MHz to 50.0MHz
- Frequency Stability:  $\pm 25.00\text{ppm}$  to  $\pm 100.00\text{ppm}$
- Ageing:  $\pm 5\text{ppm}$  max per year @ 25°C

### Electrical Parameters

- Supply Voltage: 2.5V  $\pm 5\%$

### Operating Temperature Ranges

- -40 to 85°C
- -40 to 125°C

### Output Details

- Output Compatibility: CMOS
- Drive Capability: 15pF

### Output Control

- Enable/Disable 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:  
-40 to 85°C: 10 $\mu$ A max  
-40 to 125°C: 20 $\mu$ A max

### Environmental Parameters

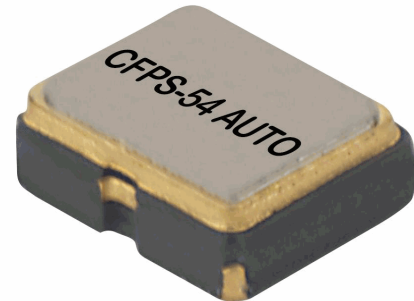
- Storage Temperature Range: -55 to 150°C
- Qualified to AEC-Q200 Rev D

### Ordering Information

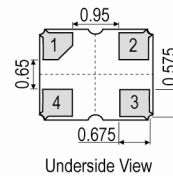
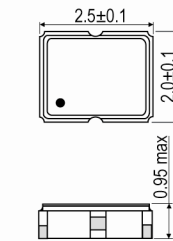
- Frequency\*
- Model\*
- Output
- Frequency Stability\*
- Operating Temperature Range\*
- Supply Voltage  
(\*minimum required)
- Example  
20.0MHz CFPS-54 AUTO  
CMOS  $\pm 100\text{ppm}$  -40 to 125C 2.5V

### Compliance

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



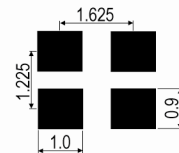
### Outline (mm)



Underside View

Pad Connections  
 1. Enable/Disable  
 2. GND  
 3. Output  
 4. +Vs

Solder Pad Layout



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### Packaging Details

- Pack Style: RL3K    Tape & reel in accordance with EIA-481  
Standard Pack Quantity: 3,000
- Pack Style: Reel    Tape & reel in accordance with EIA-481  
Standard Pack Quantity: 1,000

### Electrical Specification - maximum limiting values 2.5V ±5%

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
2.0MHz	9.999999MHz	-40 to 85	±25.0	6	7	40/60%
		-40 to 125	±50.0	6	7	40/60%
10.0MHz	19.999999MHz	-40 to 85	±25.0	8	7	40/60%
		-40 to 125	±50.0	8	7	40/60%
20.0MHz	31.999999MHz	-40 to 85	±25.0	8	6	40/60%
		-40 to 125	±50.0	8	6	40/60%
32.0MHz	50.0MHz	-40 to 85	±25.0	20	5	40/60%
		-40 to 125	±50.0	20	6	40/60%

*This document was correct at the time of printing; please contact your local sales office for the latest version.*

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