



\* 0.95mm high version available on request.

## Features

- ▶ High shock & vibration resistance
- ▶ Military temperature range -55+125°C option
- ▶ Low power consumption
- ▶ Miniature ceramic package

## Standard Calibration Tolerances

32.0 ~ 200kHz	201 ~ 560kHz	561kHz ~ 1.0MHz
±20ppm	±100ppm	±100ppm
±100ppm	±250ppm	±500ppm

## Specifications

Parameters	Product	Option Code
	CC4V	
Terminations:	Gold plated pads	T1A
Frequency range:	32.768kHz 32.0kHz ~ 1.0MHz	
Calibration tolerance:	see table Other	specify
Operating temperature range:	-40 to +85°C -55 to +125°C	M
Storage temperature range:	-55 to +125°C	
Circuit condition:	9pF (32.0 ~ 200kHz) 7pF (32.768kHz) 12.5pF (32.768kHz) 4pF (201 ~ 560kHz) 10pF (560kHz ~ 1.0MHz)	specify specify
Static capacitance (C <sub>0</sub> ):	1.2pF typ @ 32.768kHz 1.2pF typ @ 307.2kHz 1.0pF typ @ 1.0MHz	
Motional capacitance (C <sub>1</sub> ):	2.1fF typ @ 32.768kHz 1.1fF typ @ 307.2kHz 1.1fF typ @ 1.0MHz	
Equivalent series resistance:	50kΩ typ, 65kΩ max @ 32.768kHz 3.5kΩ typ, 5kΩ max @ 307.2kHz 500Ω typ, 1.2kΩ max @ 1.0MHz	
Ageing:	±3ppm max first year	
Drive level:	1.0μW max	
Turnover temperature (T <sub>0</sub> ):	+25°C ±5°C @ 32.768kHz +33°C ±5°C @ 307.2kHz +39°C ±5°C @ 1.0MHz	
Frequency / temp coefficient:	-0.035ppm/°C <sup>2</sup> ±10%	
Shock resistance:	±5ppm, 5,000g, 0.3ms, ½ sine	
Vibration resistance:	±5ppm, 20g, 10.0 ~ 2,000Hz	
Soldering condition:	Reflow, 260°C, 20 sec max	

■ Standard. □ Optional - Please specify required code(s) when ordering

## Ordering Information

Product name + termination + option codes (if any) + frequency + calibration tolerance

eg: **CC4V-T1A 32.768kHz ±30ppm** -40+85°C

**CC4V-T1A/M 76.80kHz ±100ppm** -55+125°C

Option code X (eg CC4V-T1A/X) denotes a custom spec.

- ◆ Available on T&R 2k or 10k pcs/reel
- ◆ Refer to our website for T&R and soldering details.
- ◆ Ask about higher shock & vibration specifications.