



* 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 ₀):	1.2pF typ @ 32.768kHz 1.2pF typ @ 307.2kHz 1.0pF typ @ 1.0MHz	■ ■ ■	
Motional capacitance (C ₁):	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 ₀):	+25°C ±5°C @ 32.768kHz +33°C ±5°C @ 307.2kHz +39°C ±5°C @ 1.0MHz	■ ■ ■	
Frequency / temp coefficient:	-0.035ppm/°C ² ±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.