



## Features

- ▶ Miniature ceramic package with metal lid
- ▶ High shock & vibration resistance
- ▶ Extended temperature range options
- ▶ AEC-Q200 Automotive option
- ▶ Low power consumption

## Specifications

Parameters		Product	Option Code
		CM7V	
Terminations:	Gold plated pads	■	T1A
Frequency range:	32.768kHz	■	
Calibration tolerance:	±20ppm ±100ppm	■ □	specify
Operating temperature range:	-40 to +85°C -40 to +125°C -55 to +125°C	■ □ □	E M
Storage temperature range:	-55 to +125°C	■	
Circuit condition:	4pF 6pF 7pF 9pF 12.5pF	□ □ □ □ ■	specify specify specify specify
Static capacitance (C <sub>0</sub> ):	1.2pF typ	■	
Motional capacitance (C <sub>1</sub> ):	3.7fF typ	■	
Equivalent series resistance:	50kΩ typ, 70kΩ max @ 25°C	■	
Ageing:	±3ppm max first year	■	
Drive level:	1.0μW max	■	
Turnover temperature (T <sub>0</sub> ):	+25°C ±5°C	■	
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	■	
Qualification:	Commercial AEC-Q200 (Automotive)	■ □	A

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

## Ordering Information

Product name + termination + option codes + frequency + calibration tolerance + circuit condition  
 eg: **CM7V-T1A 32.768kHz ±20ppm 12.5pF** -40+85°C  
**CM7V-T1A/EA 32.768kHz ±100ppm 7pF** -40+125°C, AEC-Q200  
 Option code X (eg CM7V-T1A/X) denotes a custom spec.

- ◆ Available on T&R 1k, 3k or 14k pcs/reel.
- ◆ Ask about higher shock & vibration specifications.