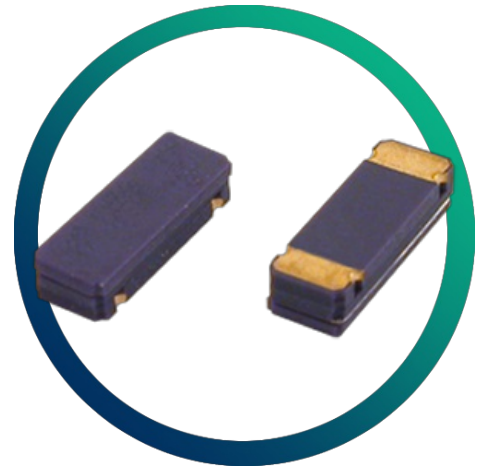


# CC4V-T1A

## Low Frequency SM Crystal - 55+125°C



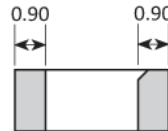
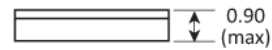
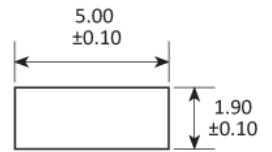
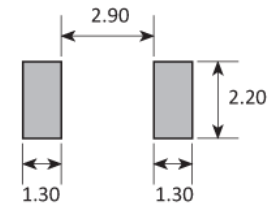
- High shock & vibration resistance
- Military temperature range -55+125°C option
- AEC-Q200 Automotive option
- Low power consumption

### CONFIGURABLE OPTIONS

Parameter	Option Code
<b>Frequency</b>	
<b>Calibration tolerance</b>	
Any	
±20ppm max (30.0kHz ~ 200kHz)	
±100ppm max (30.0kHz ~ 1.0MHz)	
±250ppm max (201 ~ 560kHz)	
±500ppm max (1.0MHz)	
<b>Operating temperature range</b>	
Any	
-40 to +85°C	
-55 to +125°C	M
<b>Circuit condition</b>	
Any	
9pF (30.0 ~ 200kHz)	
6pF (32.768kHz)	
7pF (32.768kHz)	
12.5pF (32.768kHz)	
9pF (201 ~ 560kHz)	
10pF (560kHz ~ 1.0MHz)	
<b>Qualification</b>	
Any	
Commercial	
AEC-Q200 (Automotive)	A

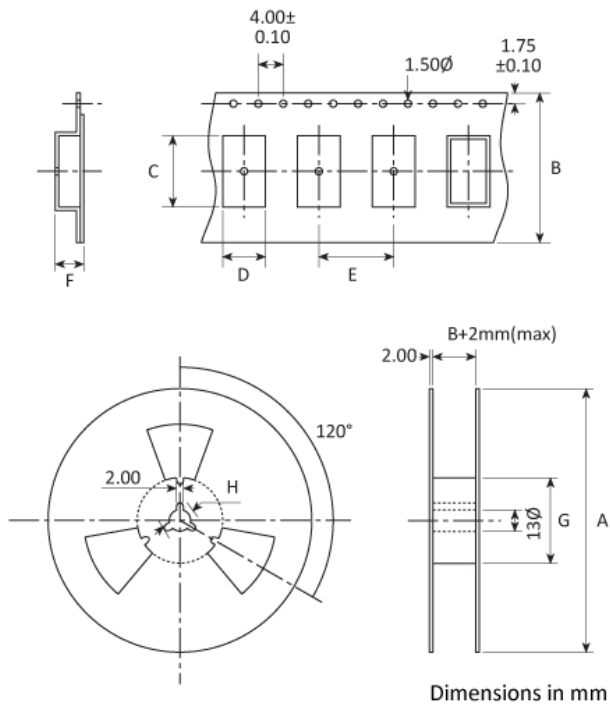
**SPECIFICATIONS**

Frequency range	32.768kHz (standard) 30.0kHz ~ 1.0MHz
Dimensions	5.0 x 1.9 x 0.9mm
Storage temperature range	-55 to +125°C
Static capacitance (C <sub>0</sub> )	1.2pF typ @ 32.768kHz 1.3pF typ @ 200kHz 1.0pF typ @ 1.0MHz
Motional capacitance (C <sub>1</sub> )	2.1fF typ
Equivalent series resistance	50kΩ typ, 65kΩ max @ 32.768kHz 3.2kΩ typ, 5.0kΩ max @ 200kHz 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 +30°C ±5°C @ 200kHz +32°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
Terminations	Gold plated pads
Soldering condition	Reflow, 260°C, 20 sec max

**PACKAGE DRAWING**

**SOLDER PAD LAYOUT**


TOP VIEW

Dimensions in mm

**TAPE & REEL SPECIFICATION**


A:178° / B:12 / C:5.3 / D:2.2 / E:4 / F:1.4 / G:80 / H:21

\*Larger reel size available. Please ask for details