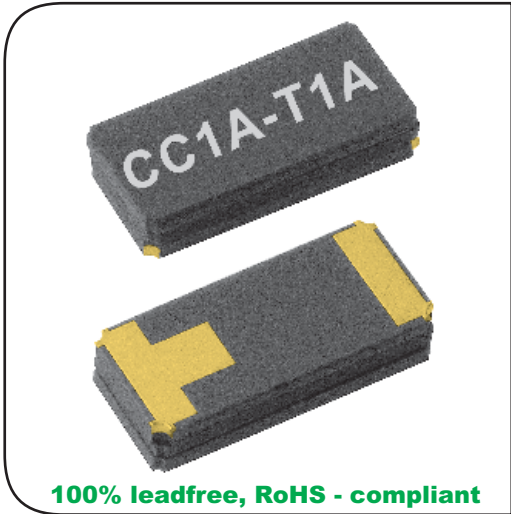
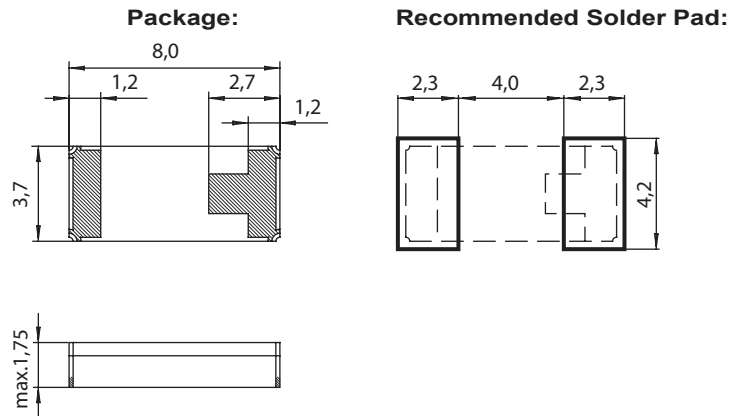


CC1A-T1A

AT Crystal 8 MHz – 30 MHz



DIMENSIONS



All dimensions in mm typical

Small SMT ceramic package
 Package height 1.75 mm
 Fundamental mode frequencies
 SMD-package in Tape and Reel
 Ind. and Ext. temperature ranges
 High stability
 Low aging
 High shock and vibration resistance

DESCRIPTION:

This SMD ceramic package has been specially designed for small industrial, telecom and electronic applications. All frequencies are generated in fundamental mode.

The crystals are supplied in special trays (100 crystals per tray).

For pick-and-place equipment, the parts are available in 16 mm tapes:

7" (178 mm) reel with 1'000 crystals

13" (330 mm) reel with 4'000 crystals

ELECTRICAL CHARACTERISTICS AT 25°C:

Frequency Range	F_L	8–30	MHz
Load capacitance ¹⁾	C_L	20.0	pF
Frequency tolerance at 25°C ²⁾	$\Delta F/F$	+/-50	ppm
Frequency versus temperature ³⁾ TB: -40 to + 85°C TC: -55 to +125°C	$\Delta F/F_0$	+/-50 +/-100	ppm
Drive level typ/max	P	100 / 500	μW
Insulation resistance min.	R_i	500	MΩ
Aging first year max.	$\Delta F/F$	+/-3	ppm

1) Other load capacitances on request.

2) Tighter and wider frequency tolerances on request.

3) Tighter thermal stability on request.

Frequency [MHz]	$R_s[\Omega]$ typ / max	C_1 [fF] typ / max	C_o [pF] typ
8 to < 10	60 / 100	4 / 7	2
10 to < 12	50 / 85	5 / 8	2.2
12 to < 16	40 / 75	6 / 10	2.5
16 to < 20	35 / 60	8 / 11	2.8
20 to < 24	30 / 50	9 / 13	3.2
24 to < 30	30 / 40	11 / 15	4

