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IC搜索

手气不错

小提示: 使用空格同时搜索多个关键词。尝试“atmel 8 bit 微控制器”。

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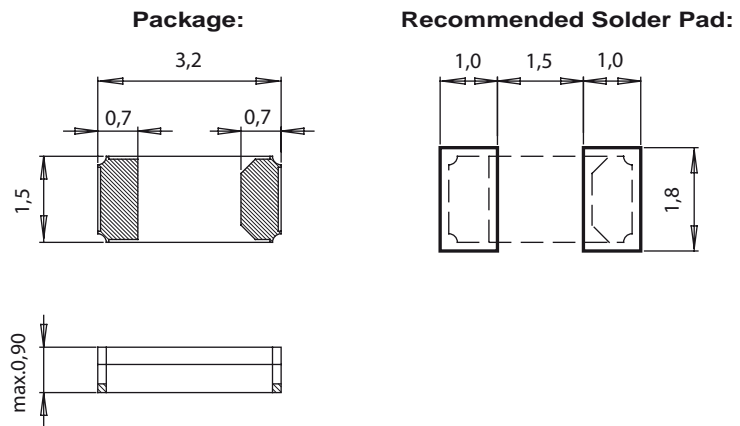
CC7V-T1A

Tuning Fork Crystal 32.768 kHz



100% leadfree, RoHS - compliant

DIMENSIONS



All dimensions in mm typical

Smallest SMT ceramic package
Package height 0.90 mm
SMD-package in Tape and Reel
Ind. and Ext. temperature ranges
High stability
Low aging
Low power consumption
High shock and vibration resistance

DESCRIPTION:

This SMD ceramic package has been specially designed for miniature telecom and portable applications. A special crystal manufacturing process is used to achieve improved electrical characteristics and a miniaturized blank size.

The crystals are supplied in special trays (200 crystals per tray).

For pick-and-place equipment, the parts are available in 12 mm tape:

- 7" (178 mm) reel with 3'000 crystals
- 10" (254 mm) reel with 7'000 crystals
- 13" (330 mm) reel with 14'000 crystals

ELECTRICAL CHARACTERISTICS AT 25°C:

Nominal Frequency	¹⁾ F_L	32.768	kHz
Load capacitance	²⁾ C_L	9.0 / 12.5	pF
Frequency tolerance	³⁾ $\Delta F/F$	+/-30	ppm
		+/-100	ppm
Series resistance typ./max.	R_S	50 / 70	k Ω
Motional capacitance typ.	C_1	4.0	fF
Static capacitance typ.	C_0	1.2	pF
Drive level max.	P	1.0	μ W
Insulation resistance min.	R_i	500	M Ω
Aging first year max.	$\Delta F/F$	+/-3	ppm
Turnover temperature	T_0	25 +/-5	°C
Frequency vs. temperature	$\Delta F/F_0$	$-0.035 \text{ ppm}/^\circ\text{C}^2 (T - T_0)^2 \pm 10\%$	ppm

1) Other frequencies on request.

2) Other load capacitances on request.

3) Tighter and wider frequency tolerances on request.

STANDARD FREQUENCIES:

Frequency kHz
32.768
Other frequencies on request

**ENVIRONMENTAL
CHARACTERISTICS:**

		Conditions	Max. Dev.
Storage temp. range		-55 to +125°C	
Industrial operating temp. range		-40 to +85°C	
Extended operating temp. range		-55 to +125°C	
Shock resistance	$\Delta F/F$	5000 g, 0.3 ms, 1/2 sine	+/-5 ppm
Vibration resistance	$\Delta F/F$	20 g / 10–2000 Hz	+/-5 ppm

**TERMINATIONS AND
PROCESSING:**

Type	Termination	Processing
CC7V-T1A	For SMD mounting Au flashed pads	Reflow soldering 260°C / 20 s max.

**PART NUMBER/
ORDERING INFORMATION
EXAMPLE:**

CC7V-T1A	32.768 kHz	9.0 pF	+/-30 ppm
<u>Crystal package</u> C = Crystal in ceramic package			Frequency tolerance
<u>Package lid</u> C = Ceramic lid			Load capacitance C_L
<u>Package size</u> 7 = 3.2 x 1.5 x 0.90 mm			Frequency F_L
<u>Blank</u> V = Tuning fork			<u>Package pad form</u> A = Pads on both ends
			<u>Pad plating</u> 1 = Au flashed pads
			<u>Package type</u> T = For SMD mounting

All specifications subject to change without notice. 03.07



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