CARDINAL COMPONENTS

Plastic Surface Mount Watch Crystals

- Extended operating temperature
- Two industry standard pin connections
- Uniform, stable performance

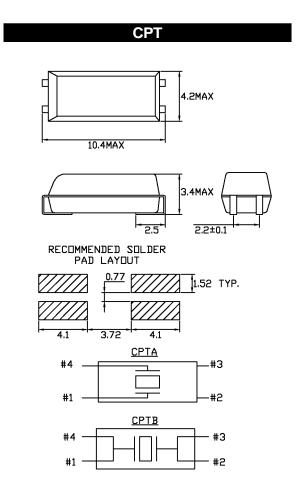
Part Numbering Example: CPTA Z - A1 B2 C5 - 32.768K D12.5

CPTA	Z	A1*	B 2	C ₅	32.7 <mark>68K</mark>	
SERIES	ADDED FEATURES	OPERATING TEMP.	STABILITY	TOLERANCE	FREQUENCY	LC
CPTA CPTB	BLANK = BULK PACK Z = TAPE AND REEL	$A0 = -10^{\circ}C \sim +60^{\circ}C$ $A1 = -10^{\circ}C \sim +70^{\circ}C$	$B1 = \pm 100$ $B2 = \pm 50$	$C1 = \pm 100$ $C2 = \pm 50$		D12.5 pl
		A2 = -40°C ~ +85°C A3 = -55°C ~ +125°C	$B3 = \pm 30$ $B4 = \pm 10$	$C3 = \pm 30$ $C4 = \pm 10$ $C5 = \pm 20$		

^{*}NOTE: The above ABC combinations cover basic specification options. We tailor our crystal specifications to meet customer requirements. Please contact our sales department if you don't see exactly what you need.

Specifications:

Frequency Range:	32.768 KHz			
	Custom frequencies available.			
Operating Temperature:	-40°C ~ +85°C Standard			
Temperature Coefficient:	$-(0.035 \pm 0.008) \text{ ppm/}^{\circ}\text{C}^{2}$			
Frequency Tolerance:	± 20 ppm			
(at 25°C)				
Load Capacitance:	12.5 pF			
	Other values are available.			
Shunt Capacitance:	1.35 pF <i>Typical</i>			
Resistance:	50,000Ω Max			
Standard:	Shunt Capacitance: 0.85 pF typ.			
	Motional Capacitance: 2.0 fF typ.			
	Aging: ± 3 ppm/year Max			
	Drive Level: 1.0 µW Max			
	Packaging: Tape & Reel (2K per Reel)			



CPTA

CPTB

D12.5

Series

