



**THE DATASHEET OF  
9HT10-32.768KDZY-T**



## Features

- Frequency range : 32.768 kHz
- SMD : Ceramic package
- External dimensions (mm)  
L : 3.2 x W : 1.5 x H : 0.75
- RoHS compliant & Pb free

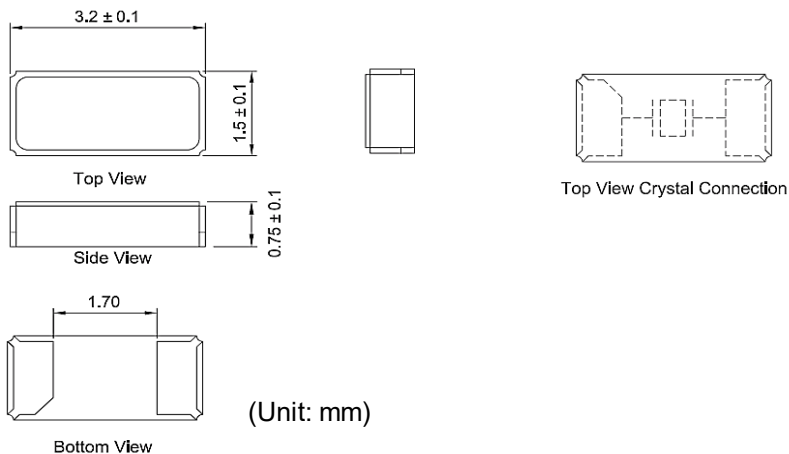
## Applications

- Small mobile devices
- Communication devices
- Consumer products
- Commercial & industrial applications

## Electrical Characteristics

Item	Symbol	9HT10	Conditions
Nominal Frequency	$f_0$	32.768 kHz	
Frequency Tolerance	$\Delta f/f_0$	$\pm 10\text{ppm}$ , $\pm 20\text{ppm}$ , $\pm 30\text{ppm}$ , $\pm 50\text{ppm}$	at 25°C
Load Capacitance	$C_L$	6pF, 7pF, 9pF, 12.5pF	
Operating Temperature Range	$T_{OTR}$	-40°C ~ +85°C	
		-40°C ~ +125°C	
Storage Temperature Range	$T_{STR}$	-55°C ~ +125°C	
Turnover Temperature	$T_M$	25°C $\pm$ 5°C	
Temperature Coefficient	$\beta$	-0.04 ppm/°C <sup>2</sup> Max.	
Motional Capacitance	$C_1$	3.1 fF Typ.	
Motional Resistance (ESR)	$R_1$	70 kΩ Max.	at 25°C
Drive Level	$D_L$	0.1μW Typ. / 1.0μW Max.	
Aging	$\Delta f/f_0$	$\pm 3$ ppm Max.	at 25°C $\pm$ 3°C, first year
Shunt Capacitance	$C_0$	1.0 pF Typ.	

## Dimensions



## Ordering Information

**9HT10 - 32.768K D Z F - T**

Frequency Tolerance (at 25°C)	
B	± 50 ppm
A	± 30 ppm
D	± 20 ppm
E	± 10 ppm

Operating Temperature Range	
Z	-40°C ~ +85°C
W	-40°C ~ +125°C

Packaging Method	
T	Tape & Reel

Load Capacitance	
B	6 pF
Y	7 pF
C	9 pF
F	12.5 pF

## Packing

$A_o = 1.8 \pm 0.10 \text{ mm}$   
 $B_o = 3.5 \pm 0.10 \text{ mm}$   
 $K_o = 1.0 \pm 0.10 \text{ mm}$

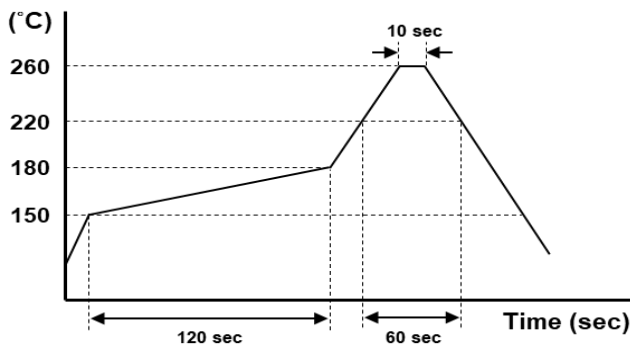
(Unit: mm)

CARRIER TAPE DIMENSIONS		K1	P0	P1	P2	D0	D1	E	F	10P0	W	T
		-	4	4	2	1.55	1.1	1.75	5.5	40	12	0.25

REEL DIMENSIONS		W	W1	L	L1
		16±1.4	13±0.3	180+0/-3	60.2±0.5

## Reflow Profile



Total time : Max. 200 sec.  
Solder melting point : 220°C

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- [View 9HT10-32.768KDZY-T on WIN SOURCE](#)
- [TXC CORPORATION Information](#)

## Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management