

Features

- > Frequency range : 32.768 kHz
- > SMD seam sealing ceramic package
- > Supply voltage : 1.8V ~ 3.3V
- > CMOS output
- > Tri-state function available
- > External dimensions (mm)
L : 5.0 x W : 3.2 x H : 1.2
- > RoHS compliant & Pb free

Applications

- > Real-time clock (RTC)
- > PC, NB, Tablet, STB
- > Audio, Video, Gaming
- > Server, Switch, Router
- > Security devices
- > Consumer products

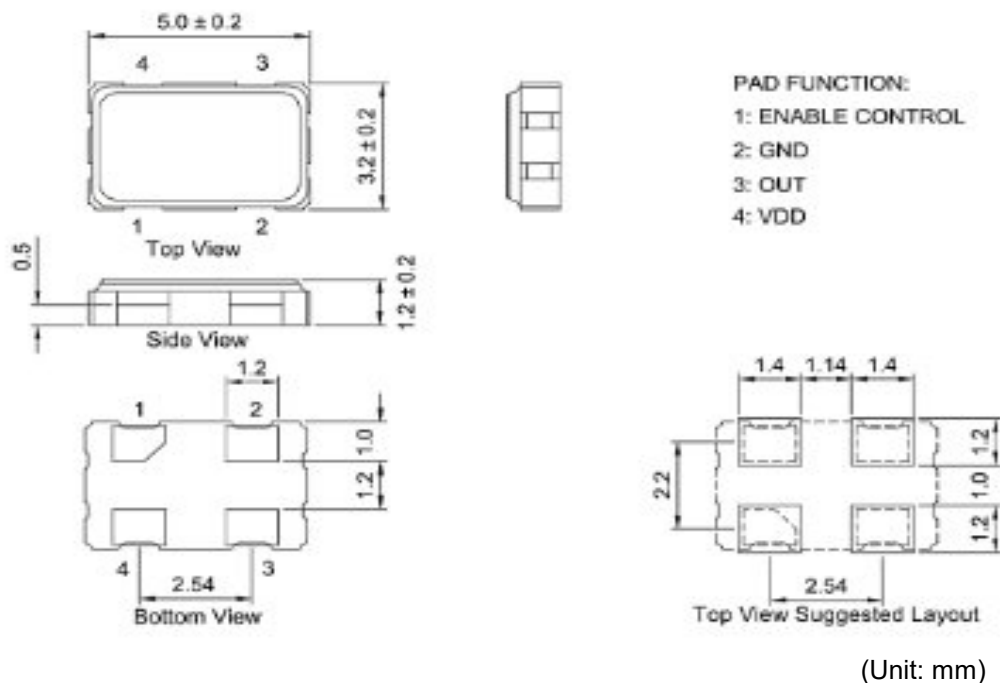
Electrical Characteristics

Item	7CZ	Conditions
Frequency Range (F_0)	32.768 kHz	
Frequency Stability (F_{stab})	± 25 ppm	-10°C ~ +70°C
	± 50 ppm, ± 25 ppm	-40°C ~ +85°C
Operating Temperature Range (T_{OTR})	-10°C ~ +70°C	
	-40°C ~ +85°C	
Supply Voltage (V_{DD})	1.8V, 2.5V, 3.3V	$V_{DD} \pm 10\%$
Current Consumption (I_{DD})	3 mA Max.	
Output Type	CMOS	
Output Load (C_L)	15 pF	
Output Voltage High (V_{OH})	90% V_{DD} Min.	
Output Voltage Low (V_{OL})	10% V_{DD} Max.	
Rise & Fall Time (T_r / T_f)	200 ns Max.	10% ~ 90% of V_{DD}
Duty Cycle	45% ~ 55%	
Start-up Time	10 ms Max.	
Enable Voltage High, Logic "1"	70% V_{DD} Min.	Input to Pin1 Note [1]
Enable Voltage Low, Logic "0"	30% V_{DD} Max.	
Aging (F_{aging})	± 5 ppm Max.	at 25°C $\pm 3^\circ$ C, first year
Storage Temperature Range (T_{STR})	-55°C ~ +125°C	

Notes:

[1] Output will be enable if Pin1 is Logic "1" or Open; Output will be disable if Pin1 is Logic "0".

Dimensions

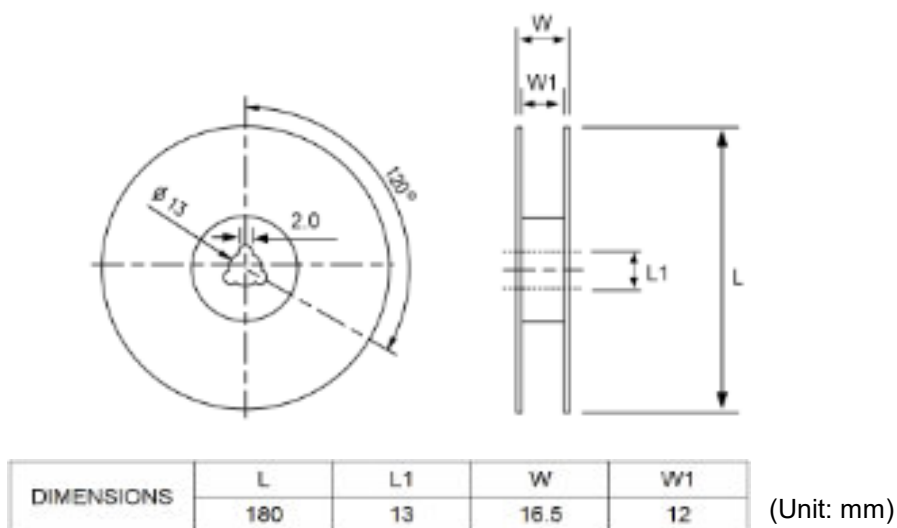
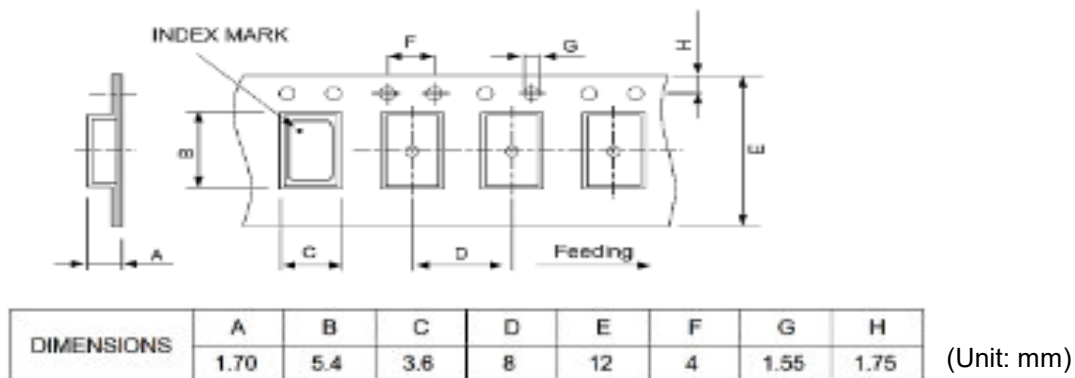


Ordering Information

7CZ - 32.768K - B E - T

Supply Voltage	Packaging Method	Frequency Stability
B 3.3 V C 2.5 V D 1.8 V	T Tape & Reel	A ±25 ppm (-10°C ~ +70°C) D ±25 ppm (-40°C ~ +85°C) E ±50 ppm (-40°C ~ +85°C)

Packing



Reflow Profile

Solder melting point : $220^{\circ}\text{C} \pm 10^{\circ}\text{C}$, 60 sec. Min.

Peak temperature : $260^{\circ}\text{C} \pm 10^{\circ}\text{C}$, 10 sec. Min.

