7XZ
kHz CMOS Oscillator

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 : 3.2 x W : 2.5 x H : 1.0
- RoHS compliant & Pb free

Applications

- Real-time clock (RTC)
- WLAN, NFC, SiP Modules
- PC, NB, Tablet, Computer peripherals
- Audio, Video, Gaming, DSC, STB
- Server, Switch, Router
- Security devices, Smart meters
- Consumer products
- Internet of Things (IoT)

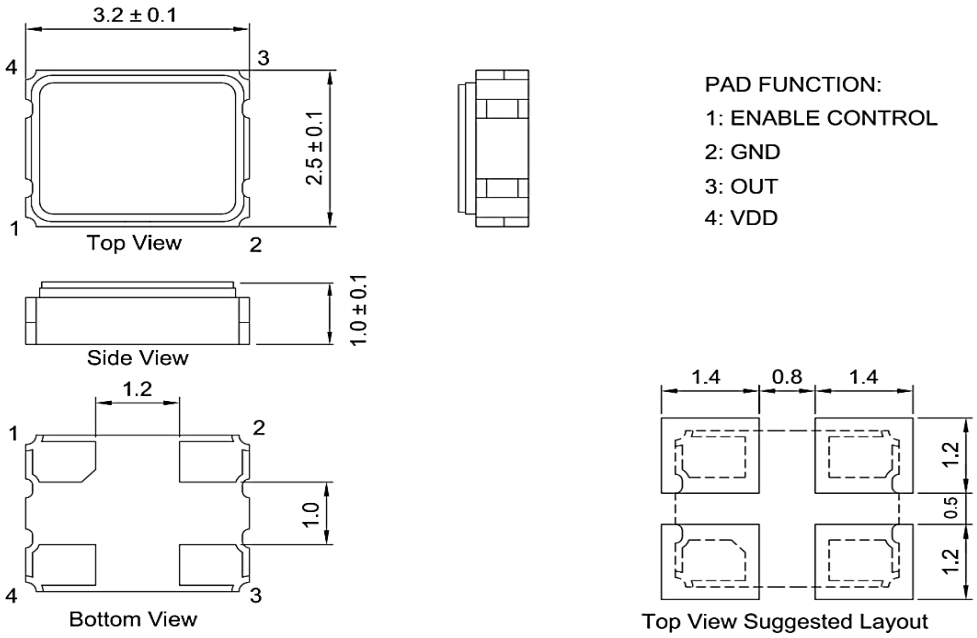
Electrical Characteristics

Item	7XZ	Conditions
Frequency Range (F_0)	32.768 kHz	
Frequency Stability (F_{stab})	±25ppm	-10°C ~ +70°C
	±50ppm, ±25ppm	-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} ± 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±3°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



(Unit: mm)

Ordering Information

7XZ - 32.768K - B E - T

Supply Voltage

B	3.3 V
C	2.5 V
D	1.8 V

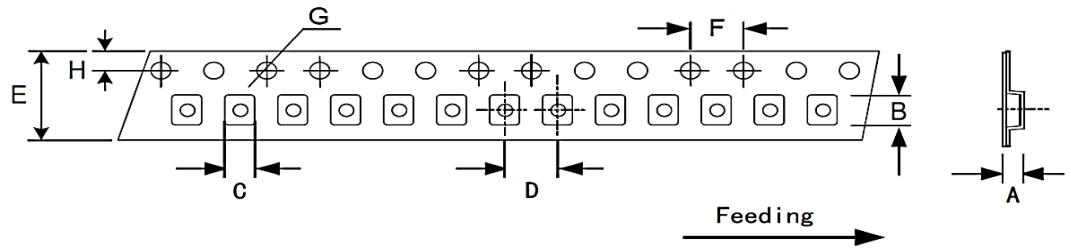
Packaging Method

T	Tape & Reel

Frequency Stability

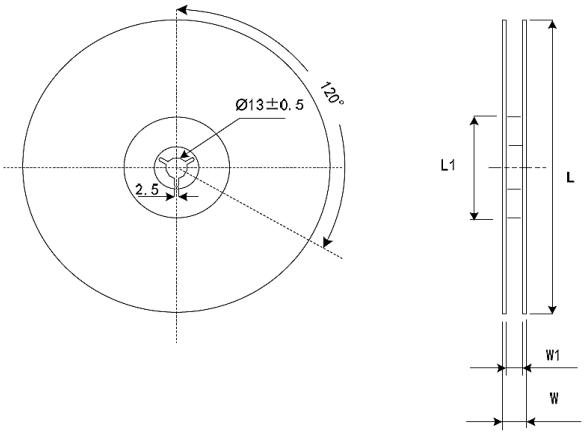
A	±25 ppm (-10℃ ~ +70℃)
D	±25 ppm (-40℃ ~ +85℃)
E	±50 ppm (-40℃ ~ +85℃)

Packing



DIMENSIONS	A	B	C	D	E	F	G	H
	1.65 ±0.10	3.40 ±0.10	2.70 ±0.10	4.00 ±0.10	8.00 ±0.20	4.00 ±0.10	1.55 ±0.05	1.75 ±0.10

(Unit: mm)

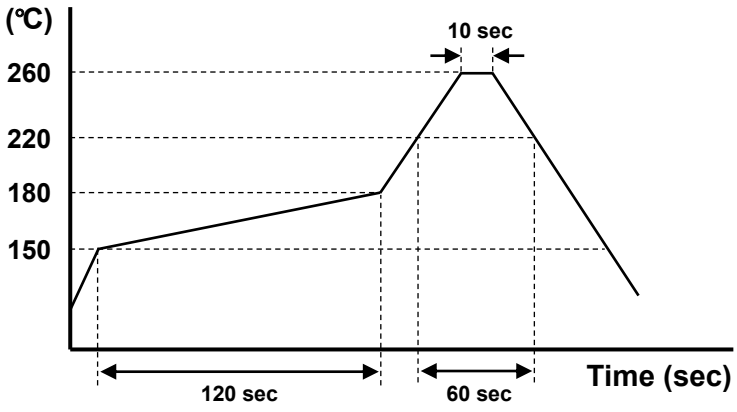


DIMENSIONS	L	L1	W	W1
	178 ±1.00	60.2 ±0.50	11.5 ±0.2	8 +1/-0

(Unit: mm)

Reflow Profile

Solder melting point : 220℃ ± 10℃, 60 sec. Min.
Peak temperature : 260℃ ± 10℃, 10 sec. Min.



Mouser Electronics

Authorized Distributor

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TXC Corporation:

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