

Features

- Frequency range : 32.768 kHz
- SMD : Ceramic package
- External dimensions (mm)
L : 3.2 x W : 1.5 x H : 0.9
- RoHS compliant & Pb free

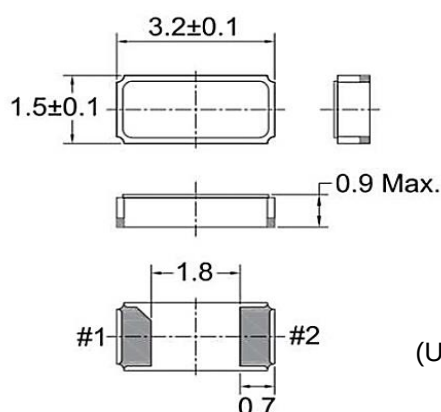
Applications

- Small mobile devices
- Communication devices
- Consumer products
- Smart meters
- Commercial & industrial

Electrical Characteristics

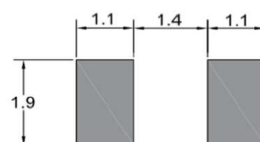
Item	Symbol	QT3CDL	Conditions
Nominal Frequency	f_0	32.768 kHz	
Frequency Tolerance	$\Delta f/f_0$	$\pm 10\text{ppm}$, $\pm 20\text{ppm}$	at 25°C
Load Capacitance	C_L	6pF, 7pF, 9pF, 12.5pF	
Operating Temperature Range	T_{OTR}	-40°C ~ +85°C	
Storage Temperature Range	T_{STR}	-55°C ~ +125°C	
Turnover Temperature	T_M	25°C $\pm$ 5°C	
Temperature Coefficient	β	-0.034 $\pm$ 0.006ppm/°C ²	
Motional Resistance (ESR)	R_1	50 k Ω Max.	at 25°C
Drive Level	D_L	0.5 μ W Max.	
Aging	$\Delta f/f_0$	± 3 ppm Max.	at 25°C $\pm$ 3°C, first year
Shunt Capacitance	C_0	1.3 pF Typ.	

Dimensions



(Unit: mm)

Recommended Pad Layout



Internal Connection



Ordering Information

QT3CDL - 32.768K D Z F - T

Frequency Tolerance (at 25°C)

D ± 20 ppm
E ± 10 ppm

Frequency Stability (over Temp.)

Z Standard for kHz

Packaging Method

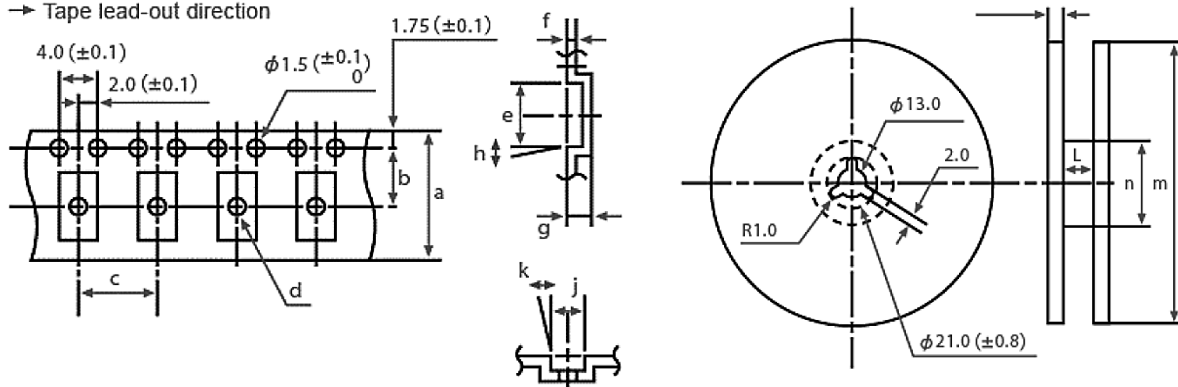
T Tape & Reel

Load Capacitance

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

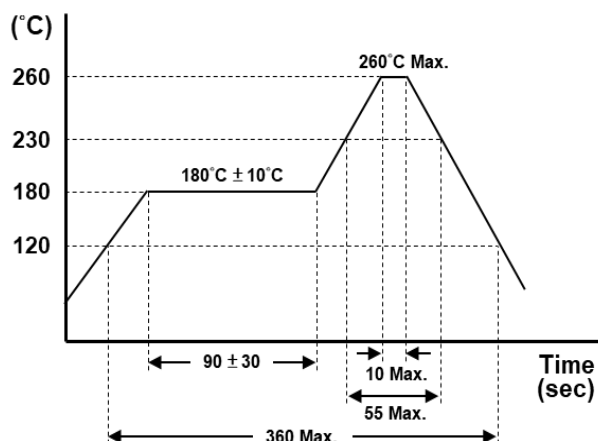
Packing

→ Tape lead-out direction



a	b	c	d (φ)	e	f	g	h	j	k	l	m (φ)	n (φ)
12.0	5.5	4.0	1.0	3.6	0.3	1.0	5°	1.9	5°	13.0	180	60

Reflow Profile



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

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[QT3CDL-32.768KDZB-T](#) [QT3CDL-32.768KDZC-T](#) [QT3CDL-32.768KDZF-T](#) [QT3CDL-32.768KDZY-T](#) [QT3CDL-](#)
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