

### Features

- Frequency range : 32.768 kHz
- SMD : Plastic package
- External dimensions (mm)  
L : 8.0 x W : 3.8 x H : 2.55
- RoHS compliant  
Contains Pb, exempted by RoHS directive

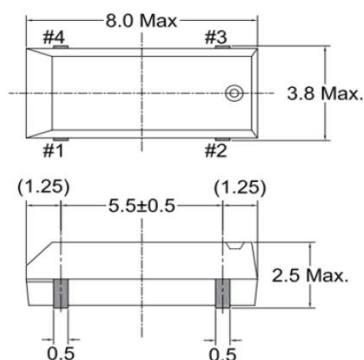
### Applications

- Real-time clock (RTC)
- Smart meters
- Security devices
- Consumer products

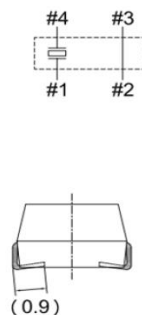
### Electrical Characteristics

Item	Symbol	QT2M	Conditions
Nominal Frequency	$f_0$	32.768 kHz	
Frequency Tolerance	$\Delta f/f_0$	$\pm 5\text{ppm}$ , $\pm 10\text{ppm}$ , $\pm 20\text{ppm}$	at 25°C
Load Capacitance	$C_L$	6.0pF, 7.0pF, 9.0pF, 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	$\beta$	-0.034 $\pm$ 0.006ppm/°C <sup>2</sup>	
Motional Resistance (ESR)	$R_1$	50 kΩ Max.	at 25°C
Drive Level	$D_L$	1 $\mu$ W Max.	
Aging	$\Delta f/f_0$	$\pm 3$ ppm Max.	at 25°C $\pm$ 3°C, first year
Shunt Capacitance	$C_0$	1.35 pF Typ.	

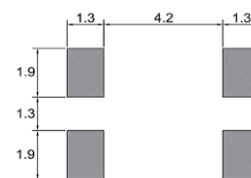
### Dimensions



#### Internal Connection



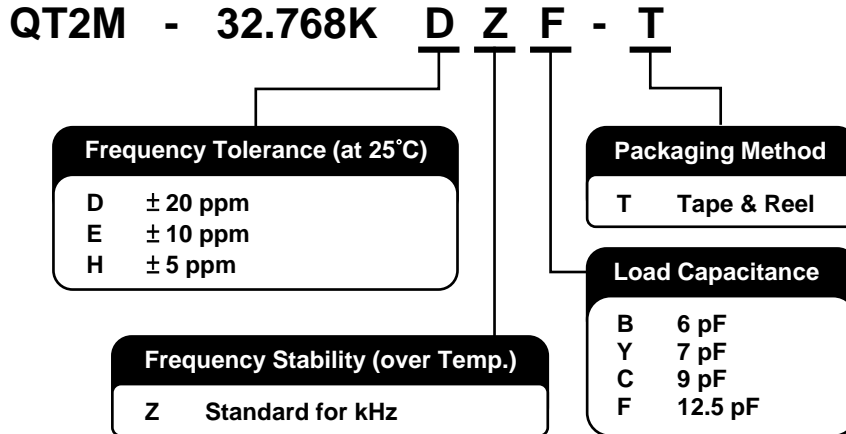
#### Recommended Pad Layout



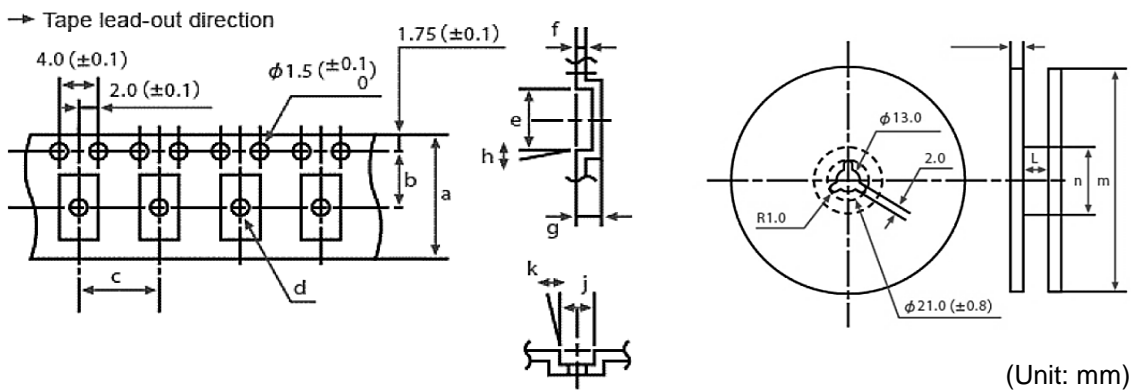
(Unit: mm)

(Note: Do not connect to external terminals with pin2 & pin3.)

### Ordering Information



### Packing



a	b	c	d (φ)	e	f	g	h	j	k	l	m (φ)	n (φ)
16.0	7.5	8.0	1.6	8.3	0.3	2.70	5°	4.05	5°	17.5	330	100

### Reflow Profile

