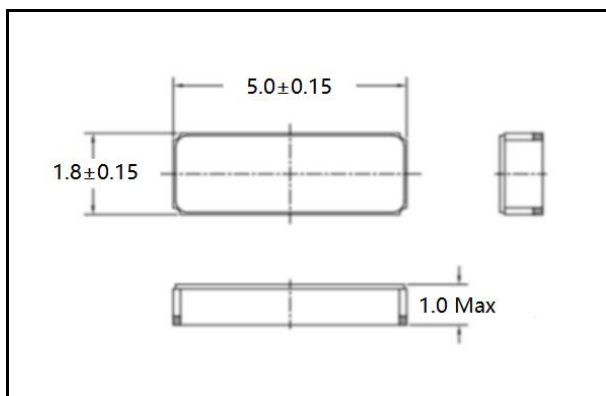




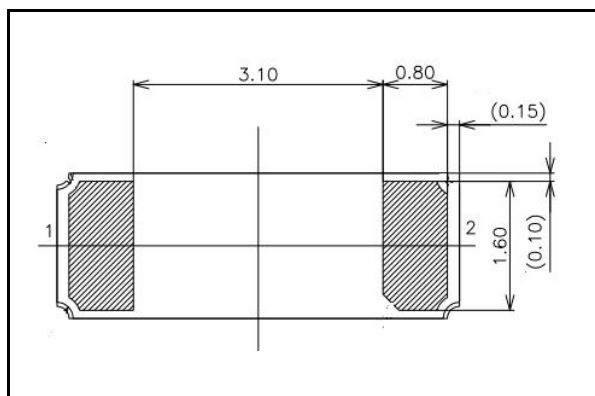
FEATURES

- Frequency range : 32.768kHz
- External dimensions (mm)
L : 5.0 x W : 1.8 x H : 1.0
- Applications
Consumer products

DIMENSION [mm]



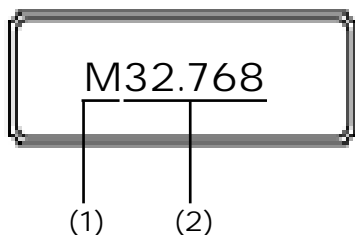
SOLDER PAD LAYOUT [mm]



STANDARD SPECIFICATIONS

Item	Model	M520	Conditions
Nominal Frequency	f_0	32.768kHz	
Frequency Tolerance	$\Delta f/f_0$	$\pm 10\text{ppm} / \pm 20\text{ppm}$	at 25°C
Load capacitance	C_L	6.0pF / 7.0pF / 9.0pF / 12.5pF	Please specify your requirement
Operating Temperature Range	T_{OPR}	-40°C ~ +85°C	
Storage Temperature Range	T_{STR}	-55°C ~ +125°C	
Turnover Temperature	T_M	25°C ± 5°C	
Temperature Coefficient	β	-0.034 ± 0.006ppm/°C ²	
Motional (series) resistance	R_1	50K Ω Max.	at 25°C
Level of drive	D_L	1 μ W Max.	
Aging (first year)	$\Delta f/f_0$	±3ppm Max.	25°C ± 3°C
Shunt capacitance	C_0	1.35pF Typ.	

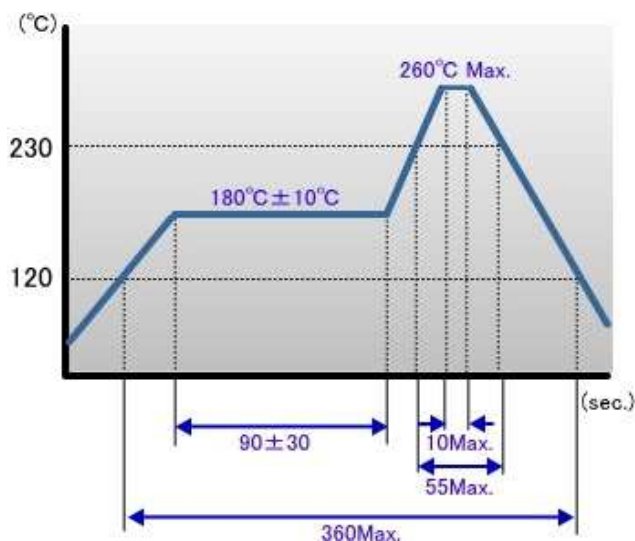
■ Part Marking [standard]



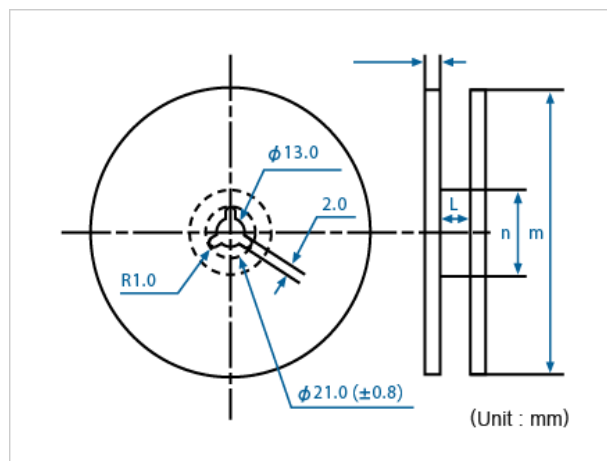
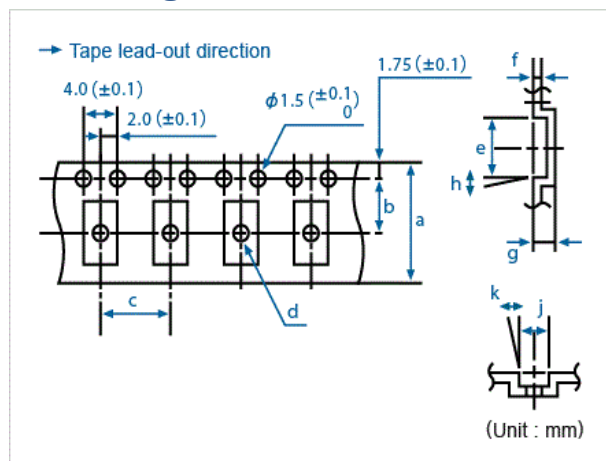
(1) =Series Code

(2) =Frequency

■ Reflow profile



■ Packing



Q'ty/reel	a	b	c	d (φ)	e	f	g	h	j	k	l	m (φ)	n (φ)
3,000	12.0	5.5	4.0	1.0	5.3	0.3	1.1	5°	2.1	5°	13.0	180	60

Product specifications are subject to change without notice.