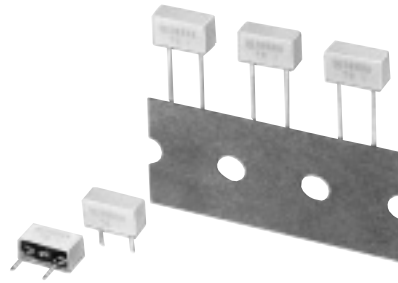


### Ceramic Resonators, Case Type

Type: **MN** (3.0 to 50.0 MHz)



#### ■ Features

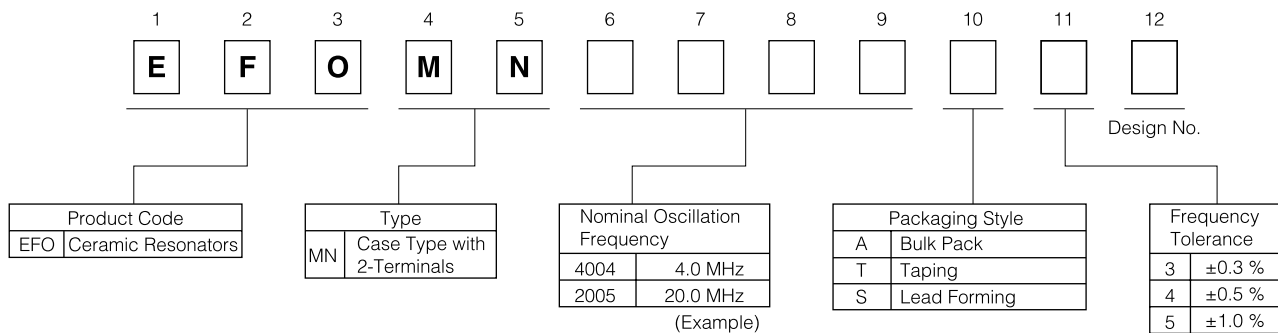
- Wide range of oscillation frequencies: 3.0 to 50 MHz
- High accuracy and stability  
Initial frequency tolerance:  $\pm 0.5\%$
- Saves height on P.C. board (Height: 5 mm max.)
- Taped version is available for automatic insertion

#### ■ Recommended Applications

- Clock generator for micro-processors
- Carrier circuit between telecommunication equipment (telephone to telephone, personal computer to printer)

#### ■ Safety Precautions (See Page 223 to 224)

#### ■ Explanation of Part Numbers



#### ■ Ratings and Characteristics

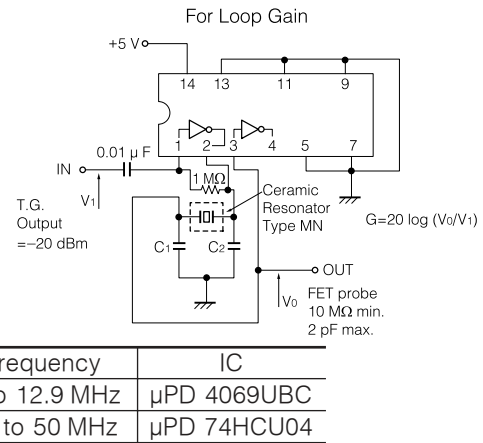
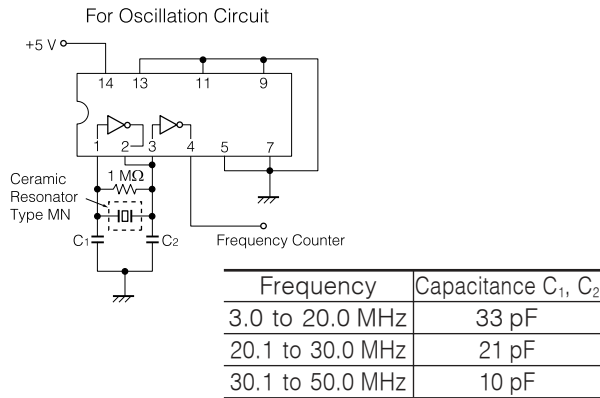
Part Number		Oscillation Frequency	Loop Gain (G)	Temperature Characteristics
Bulk Pack	Taping			
EFOMN3584A4	EFOMN3584T4	3.58 MHz $\pm 0.5\%$	10 dB	Maximum frequency drift: $\pm 0.3\%$ , $-20$ to $80^\circ\text{C}$
EFOMN4004A4	EFOMN4004T4	4.00 MHz $\pm 0.5\%$		
EFOMN4194A4	EFOMN4194T4	4.19 MHz $\pm 0.5\%$		
EFOMN5004A4	EFOMN5004T4	5.00 MHz $\pm 0.5\%$		
EFOMN6004A4	EFOMN6004T4	6.00 MHz $\pm 0.5\%$		
EFOMN8004A4	EFOMN8004T4	8.00 MHz $\pm 0.5\%$		
EFOMN1005A4	EFOMN1005T4	10.00 MHz $\pm 0.5\%$	14 dB	
EFOMN2005A4	EFOMN2005T4	20.00 MHz $\pm 0.5\%$	10 dB	
EFOMN3385A4	EFOMN3385T4	33.868 MHz $\pm 0.5\%$	8 dB	

- Operating Temperature Range:  $-20$  to  $80^\circ\text{C}$
- Frequency Drift:  $0.3\%$  max./10 years

#### Notes:

1. Also available are types other than standard products shown above in the frequency range of 3 to 50 MHz. Please contact us for more information.
2. For application in telephone dialer, please contact us.

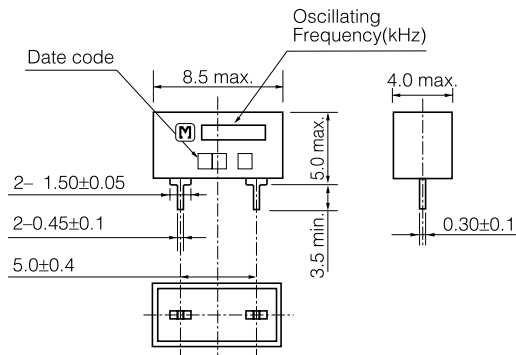
### Test Circuit Diagram



### Dimensions in mm (not to scale)

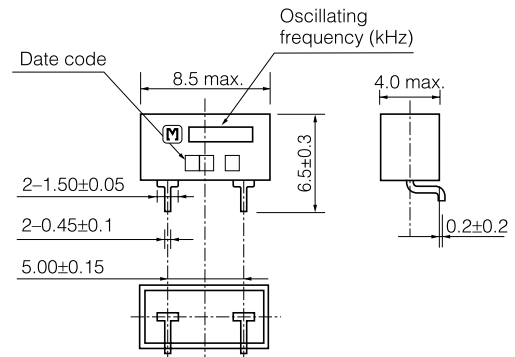
#### Bulk Pack

EFOMN□□□□A□



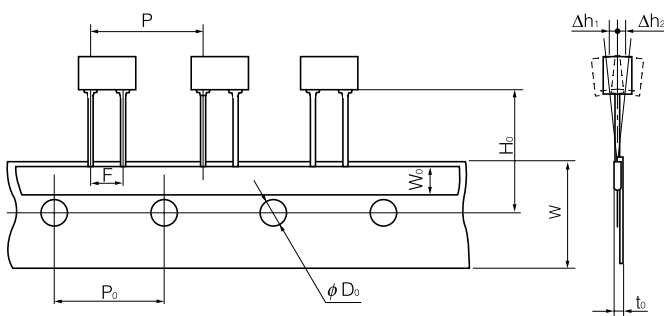
#### Lead Forming

EFOMN□□□□S□

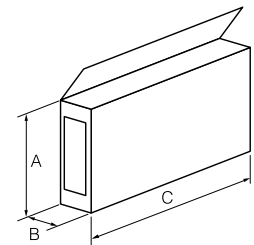


### Dimensions for Taping in mm (not to scale)

EFOMN□□□□T□



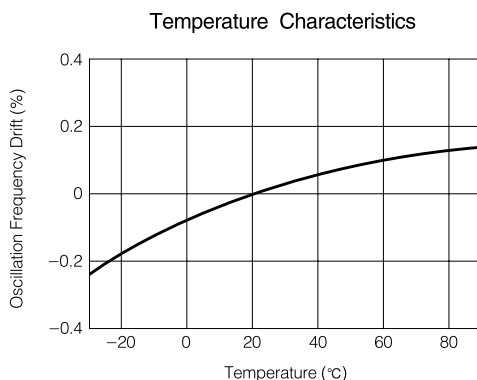
Dimensions	
P	12.7±1.0
P <sub>0</sub>	12.7±0.3
W	18.0±1.0
W <sub>0</sub>	6.0 min.
H <sub>0</sub>	18.5±0.5
φD <sub>0</sub>	φ4.0±0.2
F	5.0±0.4
t <sub>0</sub>	1.5 max.
Δh <sub>1</sub> , Δh <sub>2</sub>	2.0 max.



Dimensions*	
A	160 to 170
B	40 to 45
C	330

\*Tolerance: ±3 mm

### Typical Characteristics (EFOMN4004A4)



### Standard Packing Quantity

Taping Pack	Bulk Pack
1000 pcs./box	500 pcs./box