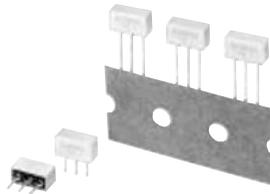


### Ceramic Resonators (Built-In Capacitors Type)

Type: **MC** (2.0 to 50.0 MHz)

Ceramic Resonator, Built-In Capacitors Type, includes two capacitors constructing Colpitts oscillation circuits. High accuracy and stable characteristics will be realized with the selected encased capacitors. Features small size due to the new construction design.



#### ■ Features

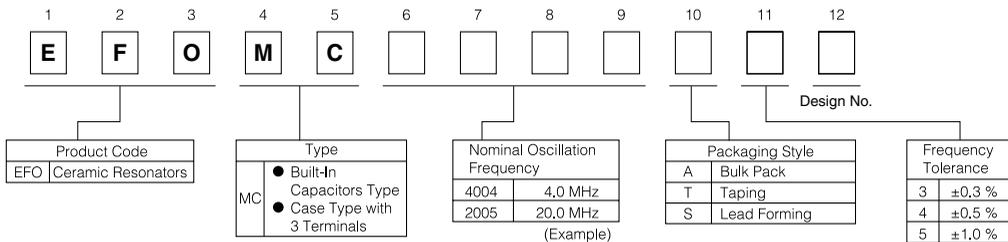
- Wide range of oscillation frequency: 2.0 to 50 MHz
- No need for capacitors in oscillation circuit
- High accuracy, high stability  
Initial frequency tolerance:  $\pm 0.3$  to  $0.5$  %
- Excellent temperature characteristics (Nominal Freq.: 3.58 to 50 MHz)  
Frequency drift:  $\pm 0.1$  % max.  $-10$  to  $60$  °C
- Saves height on P.C.-board (Height: 5 mm max.)
- Taped version is available for automatic insertion

#### ■ Recommended Applications

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

#### ■ Safety Precautions

#### ■ Explanation of Part Numbers



#### ■ Ratings and Characteristics

##### ● Type MC

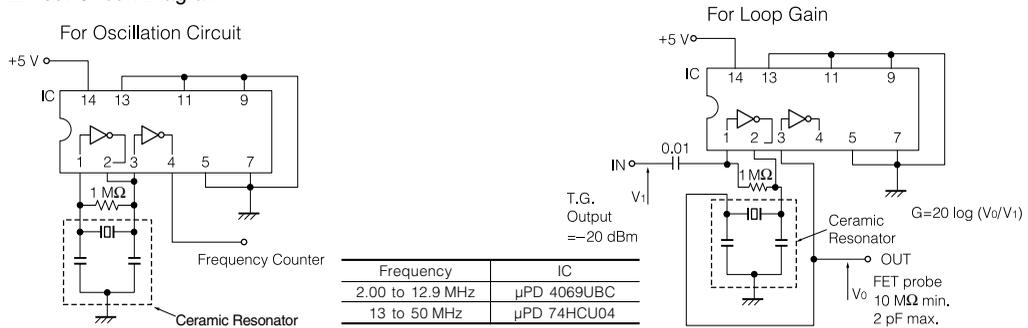
Part Number		Oscillation Frequency	Loop Gain (G)	Temperature Characteristics
Bulk Pack	Taping			
EFOMC2004A5	EFOMC2004T5	2.00 MHz $\pm 1.0$ %	10 dB	Maximum frequency drift: $\pm 0.1$ %, $-10$ to $60$ °C ( $\pm 0.2$ %, $-20$ to $80$ °C)
EFOMC3584A4	EFOMC3584T4	3.58 MHz $\pm 0.5$ %	10 dB	
EFOMC4004A4	EFOMC4004T4	4.00 MHz $\pm 0.5$ %		
EFOMC4194A4	EFOMC4194T4	4.19 MHz $\pm 0.5$ %		
EFOMC5004A4	EFOMC5004T4	5.00 MHz $\pm 0.5$ %		
EFOMC6004A4	EFOMC6004T4	6.00 MHz $\pm 0.5$ %		
EFOMC8004A4	EFOMC8004T4	8.00 MHz $\pm 0.5$ %		
EFOMC1005A4	EFOMC1005T4	10.00 MHz $\pm 0.5$ %	14 dB	
EFOMC2005A4	EFOMC2005T4	20.00 MHz $\pm 0.5$ %	10 dB	
EFOMC3385A4	EFOMC3385T4	33.868 MHz $\pm 0.5$ %	8 dB	

- Operating Temperature Range:  $-20$  to  $80$  °C
- Frequency Drift:  $0.3$  % max./10 years

#### Notes:

1. Also available are types other than above standard products in the frequency range of 2.0 to 50 MHz. Please contact us for more information.
2. For application in telephone dialer, please contact us.

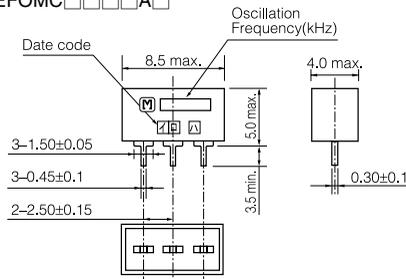
### Test Circuit Diagram



### Dimensions in mm (not to scale)

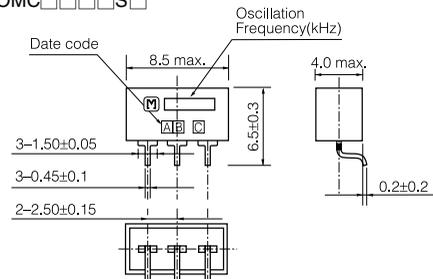
#### Bulk Pack

EFOMC□□□□A□



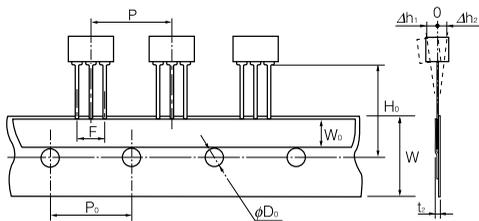
#### Lead Forming

EFOMC□□□□S□

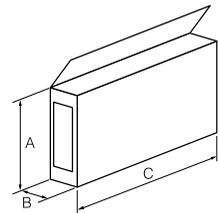


### Dimensions for Taping in mm (not to scale)

EFOMC□□□□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.



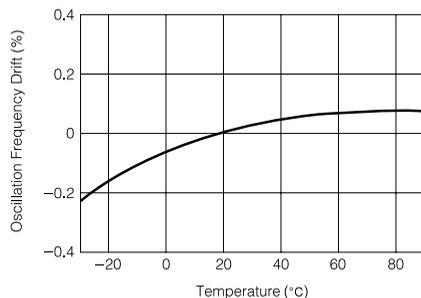
#### Dimensions\*

A	160 to 170
B	40 to 45
C	330

\*Tolerance: ±3 mm

### Typical Characteristics (EFOMC4004A4)

#### Temperature Characteristics



### Standard Packing Quantity

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