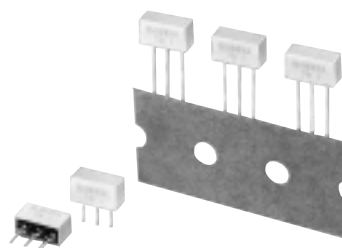


Ceramic Resonators (Built-In Capacitors Type)

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 capacitors encased, featuring small in size thanks to the new design of construction.



■ Features

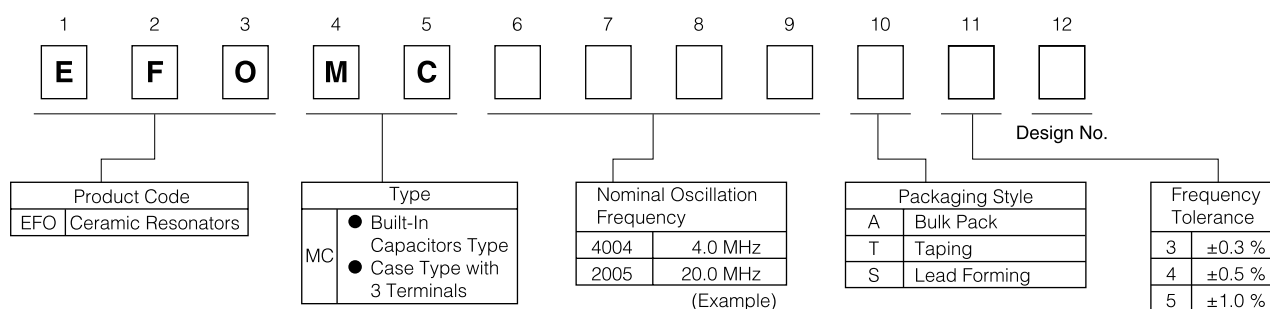
- Wide range of oscillation frequency: 2.0 to 50 MHz
- No need of capacitors in oscillation circuit
- High accuracy, high stability
Initial frequency tolerance: ± 0.3 to 0.5 %
- Excellent temperature characteristics (Nominal Freq.: 3.58 to 50 MHz)
Frequency drift: ± 0.1 % max. -10 to 60 °C
- Saves height 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)

■ Precautions for Safety (See Page 200 to 201)

■ Explanation of Part Numbers



■ Ratings and Characteristics

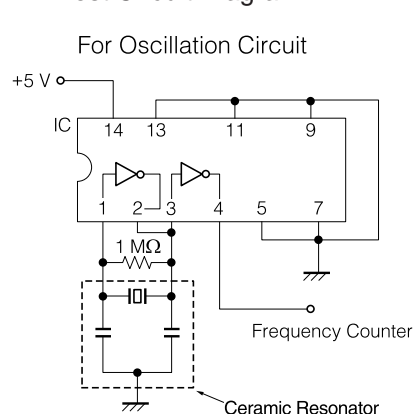
Part Number		Oscillation Frequency	Loop Gain (G)	Temperature Characteristics
Bulk Pack	Taping			
EFOMC2004A5	EFOMC2004T5	2.00 MHz \pm 1.0 %	10 dB	Maximum Frequency drift: \pm 0.6 %, -10 to 60 °C (\pm 1.0 %, -20 to 80 °C)
EFOMC3584A4	EFOMC3584T4	3.58 MHz \pm 0.5 %	10 dB	Maximum frequency drift: \pm 0.1 %, -10 to 60 °C (\pm 0.2 %, -20 to 80 °C)
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

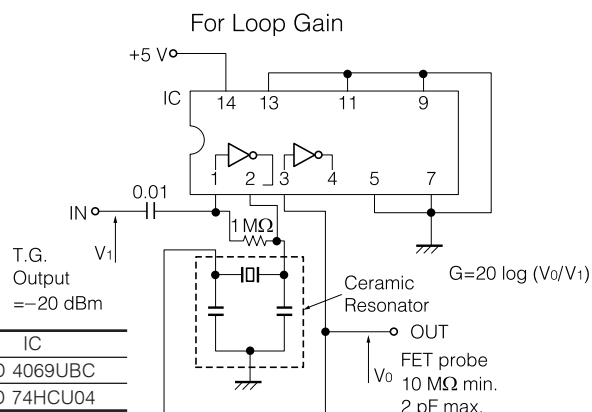
Notes:

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

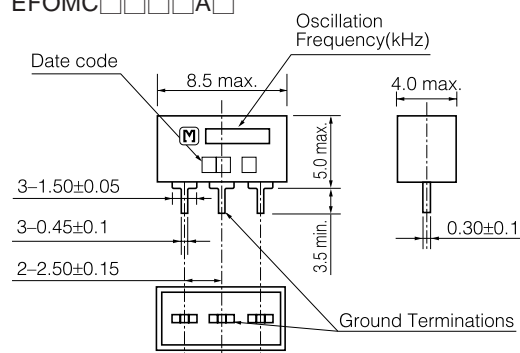


Frequency	IC
2.00 to 12.9 MHz	μPD 4069UBC
13 to 50 MHz	μPD 74HCU04



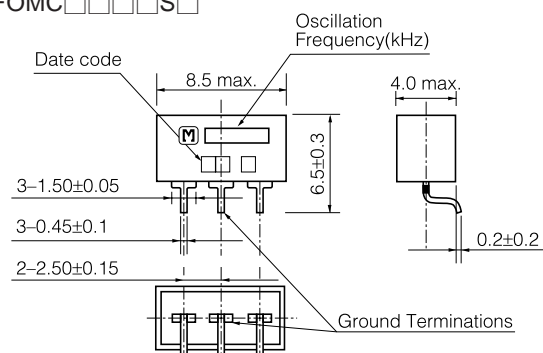
■ Dimensions in mm (not to scale)

Bulk Pack

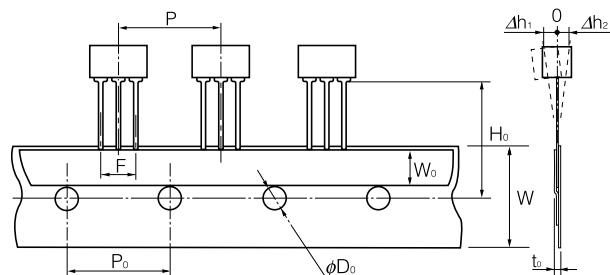
EFOMCA

Lead Forming

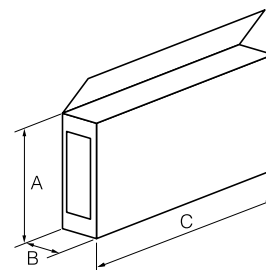
EFOMC S



■ Dimensions for Taping in mm (not to scale)

EFOMC☐☐☐☐T☐

Dimensions	
P	12.7 ± 1.0
P_0	12.7 ± 0.3
W	18.0 ± 1.0
W_0	6.0 min.
H_0	18.5 ± 0.5
ϕD_0	$\phi 4.0 \pm 0.2$
F	5.0 ± 0.4
t_0	1.5 max.
$\Delta h_1, \Delta h_2$	2.0 max.

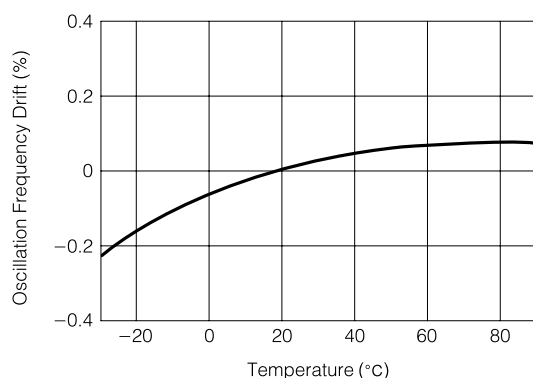


Dimensions*	
A	160 to 170
B	40 to 45
C	330

*Tolerance: ± 3 mm

■ Typical Characteristics (EFOMC4004A4)

Temperature Characteristics



- Standard Packing Quantity

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