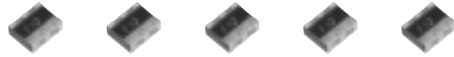


### Ceramic Resonators, Chip Type (Built-In Capacitors Type)

Type: **JC** ( 16 to 50 MHz)



#### ■ Features

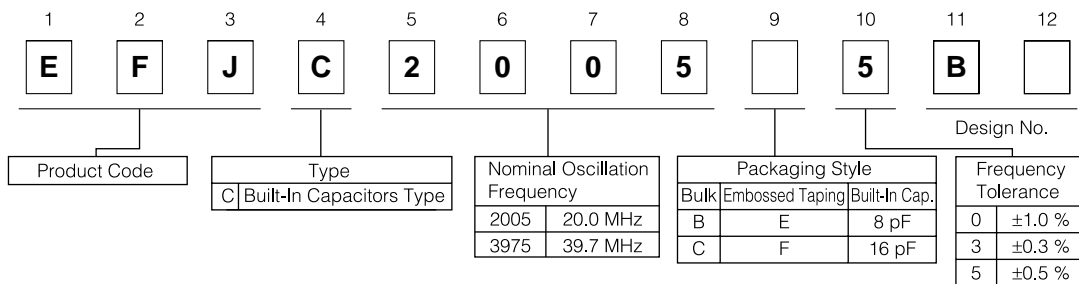
- Low Profile Type (1.2 mm maximum in thickness)
- Designed for lead free soldering
- Wide Oscillation Frequency : 16 to 50 MHz
- High reliability against soldering heat and mechanical stress
- Contributes simplification of oscillation circuits and reduces the numbers of circuit parts

#### ■ Recommended Applications

- Clock generator for microprocessors
- Carrier between telecommunication equipment (Telephone to telephone, personal computer to printer)

#### ■ Precautions for Safety (See Page 218 to 219)

#### ■ Explanation of Part Numbers



#### ■ Ratings and Characteristics

Part Number		Oscillation Frequency (fo)	Loop Gain (G)	Temperature Characteristics	Built-in Capacitors (Reference)
Bulk Pack	Embossed Taping				
EFJC2505B5B	EFJC2505E5B	25.00 MHz ±0.5 %	10 dB min.	Maximum frequency drift ±0.2 %, -20 to 80 °C	8 pF
EFJC3205B5B	EFJC3205E5B	32.00 MHz ±0.5 %			
EFJC3385B5B	EFJC3385E5B	33.868 MHz ±0.5 %			
EFJC4005B5B	EFJC4005E5B	40.00 MHz ±0.5 %	14 dB min.		16 pF
EFJC1695C5B	EFJC1695F5B	16.93 MHz ±0.5 %			
EFJC2005C5B	EFJC2005F5B	20.00 MHz ±0.5 %			

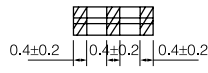
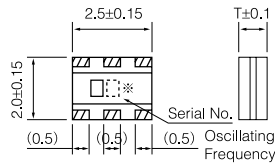
- Operating Temperature Range: -20 to 80 °C
- Frequency Drift : 0.3% max./10 years

Note:  
Also available are types other than above standard products in the frequency range of 16.0 to 50.0 MHz.

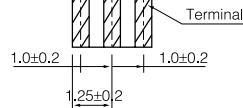
### ■ Dimensions in mm (not to scale)

#### ● Bulk

[Type JC] EFJC□□□□□□B

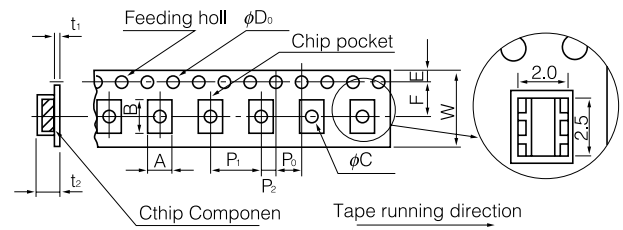


Thickness changes with Products  
(40 MHz : 0.90 mm)



#### ● Embossed Taping

EFJC□□□□□□B

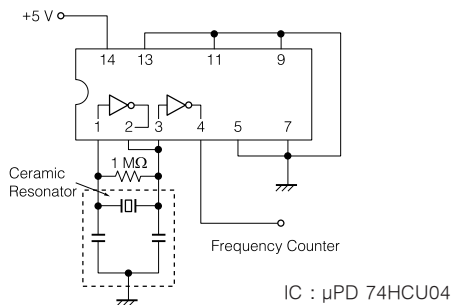


Dim.	A	B	W	F	E	P <sub>1</sub>
(mm)	2.3	2.8	8.0±0.2	3.5±0.1	1.75±0.1	4.0±0.1

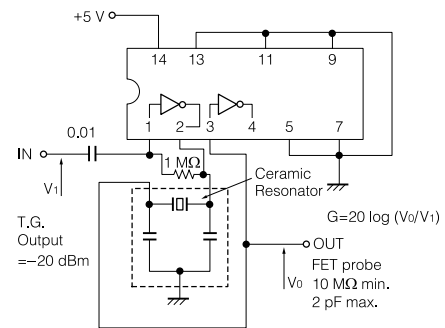
Dim.	P <sub>2</sub>	P <sub>0</sub>	φD <sub>0</sub>	t <sub>1</sub>	t <sub>2</sub>	φC
(mm)	2.0±0.1	4.0±0.1	1.5 <sup>+0.1</sup>	0.35	1.65	1.0

### ■ Test Circuits Diagram

For Oscillation Circuit

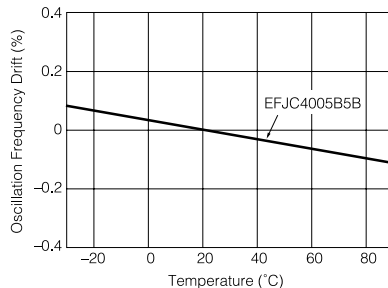


For Loop Gain



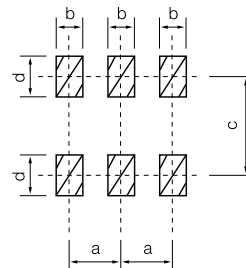
### ■ Typical Characteristics

Temperature Characteristics



### ■ Recommended Land Dimensions

[Type JC]



	Type JC
a	1.0
b	0.5
c	2.0
d	0.8

(mm)

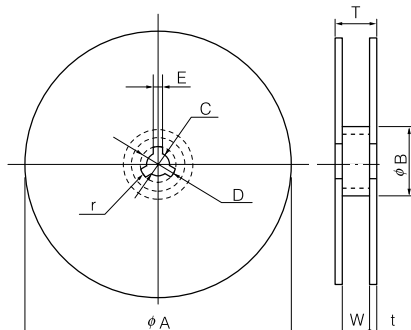
### ■ Packaging Specifications

Supplied in bulk or taped & reel packing style

#### ● Standard Packing Quantity

Type	Embossed Taping	Bulk
JC	3000 pcs./reel	500 pcs./bag

#### ● Dimensions for Reel in mm (not to scale)



[Type JC]

Dim.	φA	φB	C	D	E
(mm)	180±5	60 min.	13±0.2	21±0.8	2.0±0.5

Dim.	W	T	t	r
(mm)	9.0 <sup>+1.0</sup> <sub>-0.5</sub>	14.0 max.	2.5 max.	1.0