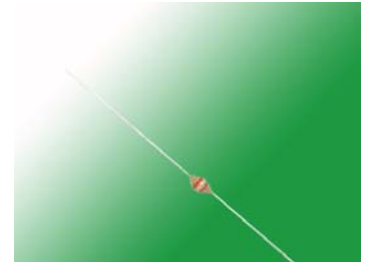


Feature

- Miniature size, Wide capacitance ,tape and reel packaging
Suitable for Auto-placement
- Coating with epoxy resin , creates excellent humidity resistance and
Mechanical strength and heat resistance
- Standard size, various lead configurations.



DIELECTRIC MATERIAL	NPO (N)	X7R (B)	Y5U (E)	Y 5V (Y)
DIELECTRIC TYPE	STABLE CLASS I DIELECTRIC	STABLE CLASS II DIELECTRIC		
ELECTRICAL PROPERTIES	WITH NEGLIGIBLE DEPENDENCE OF ELECTRICAL PROPERTIES ON TEMPERATURE , VOLTAGE , FREQUENCY AND TIME	WITH PREDICTABLE CHANGE OF PROPERTIES WITH TEMPERATURE , VOLTAGE , FREQUENCY AND TIME , THIS DIELECTRIC IS FERRO—ELECTRIC AND OFFERS HIGHER CAPACITANCE RANGES THAN CLASS I	WITH HIGH TWST DIELECRC CONSSTANT AND GREATER VARIATION OF PROPERTIES WITH TEMPERATURE AND TEST CONDITIONS. VERY HIGH CAPACITANCE PER UNIT VOLUME	
APPLICATION	USE IN CIRCUITS REQUIRING STABLE PERFORMANCE	USE AS BLOCKING、COUPLING、BY--PASSING DISCRIMINATING ELEMENT	SUITED FOR BY—PASSING AND COUPLING APPLICATION SUCH AS STORE POWER AND MEMORY CIRCUIT	
CAPACITANCE RANGE	1pF—10nF	100pF—1μF	1nF—14.7μF	
OPERATING TEMPERATURE	0±30ppm/℃ -55℃~+125℃	±15% -55℃~+125℃	+30%~-56% -30℃~+85℃	+30%~-80% -30℃~+85℃

General Specification

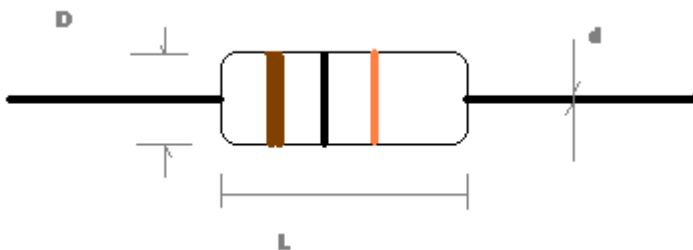
Temp.Char	Operating Voltage	Available Capacitance Range	Capacitance Tolerance
CG	25	OR5-272	C: ±0.25PF D: ±0.5pf J: ±5%, K: ±10%, M: ±20%, Z: +80%-20%
	50	OR5-222	
	100	OR5-102	
CH	50	OR5-102	
RH	50	1RO-180	
UJ	50	2R2-300	
SL	50	1RO-680	
B	25	101-224	K: ±10%, M: ±20%,
	50	101-104	
	100	101-333	
E/F(Y)	25	102-125	K: ±10%, M: ±20%, Z: +80%-20%
	50	102-105	
	100	102-104	

Quality Item & reliability Inspection

ITEM	TEST STANDARD		
	NPO (N)	X7R (B)	Y5U、Y5V (Y)
Capacitance	WITHIN THE TOLERANCE	WITHIN THE TOLERANCE	WITHIN THE TOLERANCE
Dissipation Factor	≤0.15%	≤3.5%	≤7%(220nF 以下) ≤10% (220~470nF) ≤15% (470~1000nF)
Insulation Resistance	C≤10NF IR>10000MΩ C>10NF R.C>100S	C≤25NF IR>4000MΩ C>25 NF R.C>100S	
Voltage Test	Test voltage:2.5.rated voltage The charging current may not exceed 50 mA. Duration of test:5 seconds		
TEST CONDITION			
FREQUENCY	1M HZ (C>1000PF,1KHZ)	1KHZ	
TEST VOLTAGE	1VDC		0.5 VDC
TEST VOLTAGE OF IR	The measuring voltage is equal to the rated voltage. The charging current may not exceed 50 mA		
Standard atmospheres conditions	Unless otherwise specified, the standard range of atmospheric conditions for measuring and testing is as follows: Ambient temperature 15℃~35℃ Relative humidity 45%~75% Air pressure 86Kpa~106Kpa (860-1060mbar) If there may be any doubt on the results, measurements shall be made within the following limits: Ambient temperature 25℃±1℃ Relative humidity 48%~52% Air pressure 86Kpa~106Kpa (860-1060mbar)		
Operating temperature range	The operating temperature range is the range of ambient temperatures at which the capacitor can be operated continuously at rated voltage. Temperature compensation use: NPO -55℃~+125℃ X7R -55℃~+125℃ Y5V -25℃~+85℃ Z5U +10℃~+85℃		

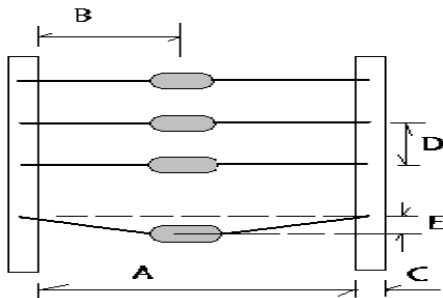
External Dimensions

1 Bulk Package



size code	Dmax	Lmax	d (±0.05mm)
	2.5mm	4.3mm	0.45mm

2 Tape Package



Tape type	A	B	C	D	E
52mm Tape width	52±1.5mm	26±0.76mm	6.35±0.4mm	5.0±0.5mm	1.2mm MAX
26mm Tape width	26±1.5mm	13±0.76mm	6.35±0.4mm	5.0±0.5mm	1.2mm MAX

Packaging: Tape and box , Ammo
Packaging Quantity: 5000PCS/box

3 Marking of Color Code

	Nominal Capacitance		
	1 st color Zone	2nd color Zone	3rd color Zone
	1 st digit	2nd digit	3rd digit
Black	0	0	×1
Brown	1	1	×10
Red	2	2	×100
Orange	3	3	×1000
Yellow	4	4	×10000
Green	5	5	×1000
Blue	6	6	
Purple	7	7	
Gray	8	8	
White	9	9	
Gold	-	-	
Silver	-	-	

E. G. If nominal capacitance is 104, respectively, brown + black+ gold should be marked
The width of the first line should be about 1.5 times than others.



Part No.

TMCC06 — CG 470 J 500 P52

↓ ↓ ↓ ↓ ↓ ↓
A B C D E F

A-----Axial Color Code Capacitor

B-----DIELECTRIC MATERIAL

CG: NPO B: X7R Y: Y5V E:Y5U

C-----Capacitance 470=47P, 104=100000P, 3R3=3.3P

D-----Tolerance J: ±5%, K: ±10%, M: ±20%, Z: +80%-20%

E-----Rated Voltage: 250=25V, 500=50V, 101=100V

F-----Lead Configuration

P26	Tape Width:26mm
P52	Tape Width:52mm

Storage Methods

- Storage condition: Temperature: 5℃--35℃
- Relative humidity: 45%--75%
- Storage period: one year