

# Mica Capacitor Technical Specification



## Capacitance precision and temperature coefficient groups

Capacitance Range ( pF)	$C_R \leq 10$	$10 < C_R \leq 100$	$100 < C_R \leq 1000$	$1000 < C_R \leq 10000$	$C_R > 10000$
Capacitance Precision	$\pm 0.5\text{pF}$	$\pm 2\% \text{ (0) } , \pm 5\% \text{ ( I ) } , \pm 10\% \text{ ( II ) }$	$\pm 2\% \text{ (0) } , \pm 5\% \text{ ( I ) }$	$\pm 1\% , \pm 2\% \text{ (0) } , \pm 5\% \text{ ( I ) }$	$\pm 0.5\% , \pm 1\% , \pm 2\% \text{ (0) } , \pm 5\% \text{ ( I ) }$
Temperature Coefficient Groups	Not demanded	C , D	D	D , E	

## Insulation resistance

Measurement Condition	Under normal temperature	Under positive high-point temperature85125
Military	$C_R \leq 10000\text{pF} , R_i \geq 1 \times 10^{11} \text{ Ohm}$	$C_R \leq 33000\text{pF} , R_i \geq 1 \times 10^9 \text{ Ohm}$
	$C_R > 10000 \text{ pF} , R_i \cdot C_R \geq 1000 \text{ Mohm } \mu \text{ F}$	$C_R > 33000 \text{ pF} , R_i \cdot C_R \geq 33 \text{ Mohm } \mu \text{ F}$
National	$C_R \leq 100000 \text{ pF} , R_i \geq 1 \times 10^{10} \text{ Ohm}$	$C_R \leq 33000\text{pF} , R_i \leq 1 \times 10^9 \text{ Ohm}$
	$C_R > 100000 \text{ pF} , R_i \cdot C_R \geq 1000 \text{ Mohm } \mu \text{ F}$	$C_R > 33000 \text{ pF} , R_i \cdot C_R \geq 33 \text{ Mohm } \mu \text{ F}$

## The parameters of dissipation angle (a)

Measurement Condition	1MHz1Vac					
Standard Capacitance Range( pF)	$C_R < 10$	$10 \leq C_R < 20$	$20 \leq C_R < 30$	$30 \leq C_R < 39$	$39 \leq C_R < 47$	$47 \leq C_R < 56$
Military $\text{tg } \delta \text{ ( } \times 10^{-4} \text{ )}$	Not demanded	15	12	11	10.5	10
National $\text{tg } \delta \text{ ( } \times 10^{-4} \text{ )}$		30		20		

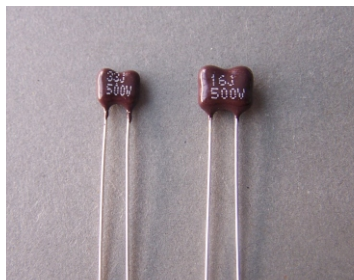
## The parameters of dissipation angle (b)

Measurement Condition	1MHz , 1Vac				1KHz, 1Vac
Standard Capacitance Range (pF )	$56 \leq C_R < 68$	$68 \leq C_R < 82$	$82 \leq C_R \leq 100$	$100 < C_R \leq 1000$	$C_R > 1000$
Military $\text{tg } \delta \text{ ( } \times 10^{-4} \text{ )}$	9.5	8	7.5		8
National $\text{tg } \delta \text{ ( } \times 10^{-4} \text{ )}$	20			10	

Test voltage  $U_t$ : under normal climate , when the work voltage  $U_w \leq 1000\text{V}$  ,  
 $U_t = 2.0U_w$  ; when the work voltage  $U_w > 1000\text{V}$  ,  $U_t = 1.5 \sim 1.8U_w$  (The special value is seen the technical document.)

*\* Special value is available if requested.*

# CY 2(DM) Series Dipped Silver Mica Capacitor



## Features

- Small Size
- Low loss and high stability
- Wide range of operating Tem.
- Meet MIL-C-5

CY2 Series Dipped Mica Capacitors have been designed to meet the exacting physical, electrical and environmental requirements of MIL-C-5. New levels of reliability, ruggedness, and electrical excellence have resulted in their wholesale adoption and used by the electronics industry for both military and commercial applications

## Key Performance Characteristics

Standard Capacitance Range : 1 to 10,000 pF  
Capacitance Tolerance: +/-1%; +/-2%; +/-5%  
Voltage Rating : 100V to 1000V  
Operating Temperature: -55 to +85 degree C  
Insulation Resistance (Min.):  $1 \times 10^9$

*\* High Frequency Type is available if requested*

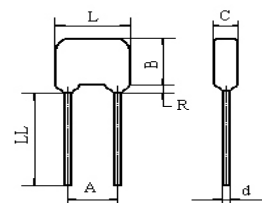
## How to Order

CY2 - 100V - D - 470PF - I

① ② ③ ④ ⑤

- ① Model
- ② Working Voltage
- ③ Temperature Coefficient Group
- ④ Nominal Capacitance
- ⑤ Capacitance Tolerance:

## Dimension



Model	Work Voltage (V)	Capacitance Range (PF)	Size(mm)						
			Lmax	Bmax	Cmax	Rmax	A	d	LLmin
CY2-0	100	10~220	6.9	6.4	4.4	2	3.1	0.45	31.75
	250	1~68							
CY2-1A	100	10~750	10	9.7	5.6	2	3.6	0.45	31.75
	250	10~330							
	500	1~200							
CY2-2A	100	10~2000	12.5	10.7	6.1	2	6.0	0.6	31.75
	250	10~1500							
	500	1~1000							
CY2-3A	100	100~8200	18.1	15.0	9.4	3.2	8.8	0.8	31.75
	250	100~6800							
	500	100~5100							
	1000	100~2500							
CY2-1	100	10~1000	9.0	8.0	5.0	2	6.0	0.6	20.0
CY2-2	100	1100~2400	12.0	8.5	6.0	2	8.0	0.6	20.0
CY2-3	100	2700~10000	17.0	12.5	7.0	3	12.5	0.8	20.0