

# MOLD TYPE CERAMIC CAPACITOR

## INTRODUCTION

The SAMWHA Mold Type capacitor, N4700 / Z5T series, are designed to meet the strict requirements of high voltage SET application.

These capacitors are especially appropriate for applications which require a low dissipation Factor and small voltage coefficient.



## FEATURES

- Low dissipation factor
- High insulations resistance.
- Epoxy coating (Flame-retardant, V-0)
- Linear temperature characteristics (N4700)
- Screw terminal type mounting
- Ceramic disc type capacitor
- Negligible piezoelectric / electrostrictive effect

## APPLICATIONS

- Industrial High voltage power supplies
- Electrostatic coating machines
- CO<sub>2</sub> lasers equipment
- Welding equipment
- X-ray equipment
- Electron microscopes, synchroscope



# MOLD TYPE CERAMIC CAPACITOR

## SPECIFICATION

ITEM INSPECTION	N4700	Z5T
Capacitance	Based on Specification	
Capacitance Tolerance	Based on Specification	
Rated Voltage	Based on Specification	
Testing Voltage (in insulating liquid or gas) (DC)	Rating voltage x 150%	
Dissipation factor	Max 0.3%	Max 0.2%
Operating temperature range	-30°C ~ +85°C	-30°C ~ +85°C
Temperature coefficient	-4700 ± 1000ppm/°C	-33% ~ +22%
Insulation resistance (DC1000V)	Min 10000MΩ	Min 10000MΩ

## DETAIL SPECIFICATION TABLE

### 1) N4700 Series

Specification	Capacitance (pF)	Capacitance Tolerance (%)	DC Rated Voltage (kV)	Dimension (mm)			Terminal Type (Screw Thread Type)
				D	L	H	
SMN4A561K24**	560	10	10	24	18	14	ISO M4
SMN4A122K30**	1200			30	19	15	ISO M4
SMN4A282K38**	2800			38	18	14	ISO M4
SMN4A502K52**	5000			52	18	14	ISO M4
SMN4A802K60**	8000			60	18	14	ISO M4
SMN4C371K20**	370	10	15	20	19	15	ISO M4
SMN4C112K30**	1100			30	18	14	ISO M4
SMN4C192K38**	1900			38	18	14	ISO M4
SMN4C342K52**	3400			52	20	16	ISO M4
SMN4C532K60**	5300			60	20	16	ISO M4
SMN4D281K20**	280	10	20	20	24	20	ISO M4
SMN4D881K30**	880			30	24	20	ISO M4
SMN4D142K38**	1400			38	24	20	ISO M4
SMN4D252K52**	2500			52	24	20	ISO M4
SMN4D402K60**	4000			60	24	20	ISO M4
SMN4E191K20**	190	10	30	20	28	24	ISO M4
SMN4E591K30**	590			30	28	24	ISO M4
SMN4E941K40**	940			40	28	24	ISO M4
SMN4E172K52**	1700			52	28	24	ISO M4
SMN4E272K60**	2700			60	28	24	ISO M4
SMN4G101K20**	100	10	40	20	32	28	ISO M4
SMN4G141K20**	140			20	32	28	ISO M4
SMN4G201K24**	200			24	32	28	ISO M4
SMN4G301K30**	300			30	32	28	ISO M4
SMN4G401K34**	400			34	33	29	ISO M4
SMN4G441K34**	440			34	32	28	ISO M4
SMN4G561K34**	560			34	32	28	ISO M4
SMN4G701K40**	700			40	32	28	ISO M4
SMN4G851K40**	850			40	32	28	ISO M4
SMN4G102K48**	1000			48	32	28	ISO M4
SMN4G132K48**	1300			48	33	29	ISO M4
SMN4G152K48**	1500			48	32	28	ISO M4
SMN4G202K60**	2000			60	32	28	ISO M5

Note : DC 50kV rated voltage available on request

# MOLD TYPE CERAMIC CAPACITOR

## DETAIL SPECIFICATION TABLE

### 2) Z5T Series

Specification	Capacitance (pF)	Capacitance Tolerance (%)	DC Rated Voltage (kV)	Dimension (mm)			Terminal Type (Screw Thread Type)
				D	L	H	
SMZT4D401K25**	400	10	20	20	24	20	ISO M4
SMZT4D701K30**	700			30	24	20	ISO M4
SMZT4D102K34**	1000			34	25	21	ISO M4
SMZT4D142K38**	1400			38	24	20	ISO M4
SMZT4D252K48**	2500			48	24	20	ISO M4
SMZT4D402K60**	4000			52	24	20	ISO M4
SMZT4E201K25**	200	10	30	24	30	26	ISO M4
SMZT4E401K30**	400			26	30	26	ISO M4
SMZT4E701K34**	700			30	30	26	ISO M4
SMZT4E941K38**	940			34	28	24	ISO M4
SMZT4E172K48**	1700			48	28	24	ISO M4
SMZT4E272K60**	2700			52	28	24	ISO M4
SMZT4G101K20**	100	10	40	20	32	28	ISO M4
SMZT4G201K20**	200			20	32	28	ISO M4
SMZT4G401K24**	400			24	32	28	ISO M4
SMZT4G701K30**	700			30	32	28	ISO M4
SMZT4G132K40**	1300			40	32	28	ISO M4
SMZT4G202K48**	2000			48	32	28	ISO M4

Note : DC 50kV rated voltage available on request

## TYPE DESIGNATION ( HOW TO ORDER )

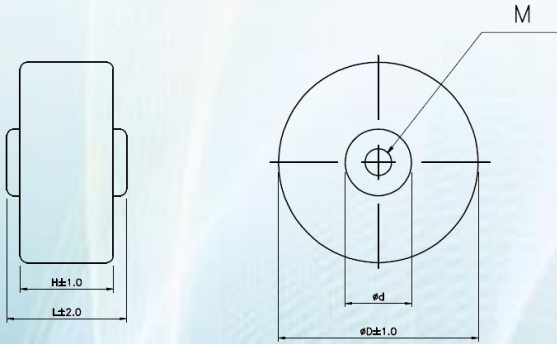
**SM**   **N**   **4C**   **112**   **K**   **30**   **NO**  
 ↓   ↓   ↓   ↓   ↓   ↓   ↓  
**1**   **2**   **3**   **4**   **5**   **6**   **7**

Code	Explanation
1	Basic Type : Samwha Mold Type
2	Temperature characteristics : N : N4700 ZT : Z5T
3	Rating Voltage (4A : 10kV, 4B : 12kV, 4C : 15kV, 4D : 20kV, 4E : 30kV, 4G : 40kV)
4	Nominal Capacitance
5	Capacitance Tolerance (K : ±10%, M : ±20%)
6	Size Code
7	Nut Type (NO, NI, BO, LO, PC)

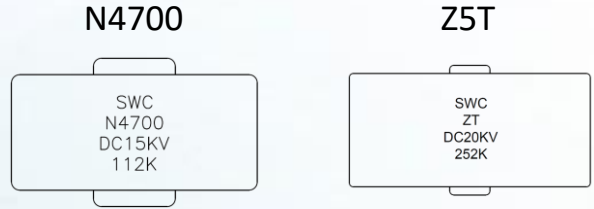
# MOLD TYPE CERAMIC CAPACITOR

## DESIGN AND MARKING

### Design



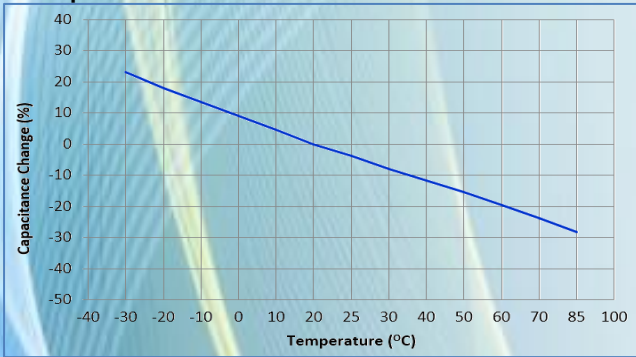
### Marking



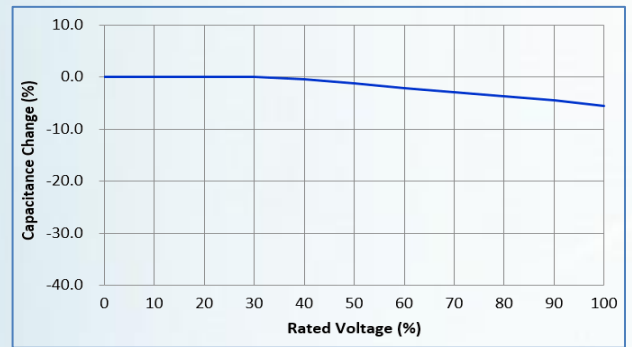
## TYPICAL CHARACTERISTICS DATA

### 1). N4700 Series

#### Temperature Characteristics

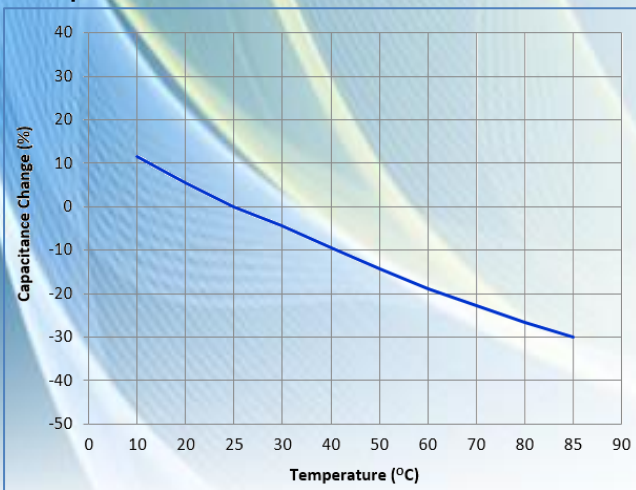


#### Typical Voltage Coefficient



### 2). Z5T Series

#### Temperature Characteristics



#### Typical Voltage Coefficient

