

# Aluminum Electrolytic Capacitors

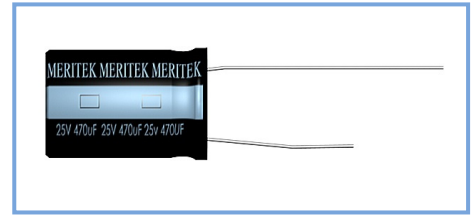


**NS Series**  
(No Sparks with DC Overvoltage)

**MERITEK**

## FEATURES

- No sparks with specified DC overvoltage applied.
- Withstanding 2000 hours application of rate ripple current at 105°C.



## SPECIFICATIONS

Item	Characteristic		
Operating Temp Range	- 25 ~ +105°C		
Rated Working Voltage	200 ~ 400VDC		
Capacitance Tolerance (120Hz 20°C)	± 20%(M)		
Leakage Current (20°C)	I ≤ 0.06CV + 10 (μA) * After 2 minutes		I : Leakage Current (μA) C : Rated Capacitance(μF) V : Working Voltage (V)
Surge Voltage (20°C)	W.V.	200	400
	S.V.	250	450
Dissipation Factor ( tan δ ) (120Hz 20°C)	W.V.	200	400
	tan δ	0.15	0.24
Low Temperature Stability	Impedance ratio at 120Hz		
	Rated Voltage (V)	200	400
	-25°C / +20°C	4	6
Load Life	After 2000 hours application of W.V. and +105°C ripple current value , the capacitor shall meet the following limits. ( DC + ripple peak voltage ≤ rated working voltage )		
	Capacitance Change	≤ ±20% of initial.	
	Dissipation Factor	≤ 200% of initial specified value	
	Leakage Current	≤ initial specified value	
Shelf Life	At +105°C no voltage application after 1000 hours the capacitor shall meet the limits for load life characteristics. ( with voltage treatment )		

## PART NUMBER SYSTEM

**NS 50V 220 M TA 16x25**

Meritek Series

Rated Voltage

Rated Capacitance

Express in micro farad(μF), First two digits are significant figures, Third digit denotes number of zeros. 'R' denotes decimal point for values less than 10μF

Tolerance

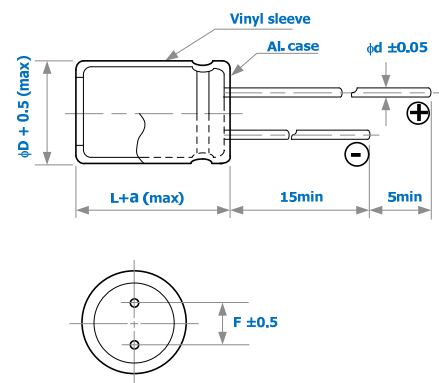
M - ±20%

Package

Code	TA	TR	Blank
	Tape & Ammo	Tape & Reel	

Case size – (D) Diameter x (L) Length in mm (Optional)

## DIMENSIONS (mm)



φD	16	18
F	7.5	7.5
d	0.8	0.8
a	1.5	1.5

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## RIPPLE CURRENT COEFFICIENTS

Frequency(Hz)	60	120	1k	10k	100k
W.V.	Multiplier				
200V	0.80	1.00	1.30	1.40	1.60
400V	0.75	1.00	1.50	1.75	1.85

Temperature(°C)	65	85	105
Multiplier	1.80	1.50	1.00

## CASE SIZE & MAX RIPPLE CURRENT

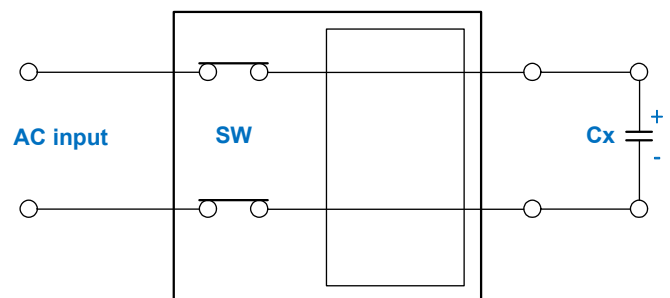
Case size : DxL (mm)  
Max. ripple current : mA(rms) 105°C 120Hz

Cap. (uF)	V	200		400	
		DxL	R.C.	DxL	R.C.
22				16x25	170
33				16x25	210
39				16x31.5	260
				18x25	250
47				16x31.5	280
56				16x40	340
				18x31.5	330
68				18x35.5	380
82				18x40	440
100		16x25	400		
120		16x31.5	480		
		18x25	470		
150		16x31.5	540		
		18x25	520		
180		16x40	660		
		18x31.5	630		
220		18x35.5	730		
		18x40	770		

## DC OVERVOLTAGE TEST CONDITION

The vent will be operated and the capacity shall become an open circuit without burning the material when the following excess DC voltage is applied.

Rated	Current	Test DC voltage
200 VDC	4A	300/375 VDC
400 VDC	2A	500/600 VDC



Constant DC voltage/current power supply