

Aluminum Electrolytic Capacitors

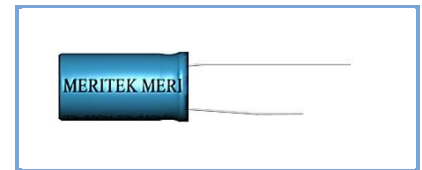


NPC Series
(Non Polarity, For Twinkling Light)

MERITEK

FEATURES

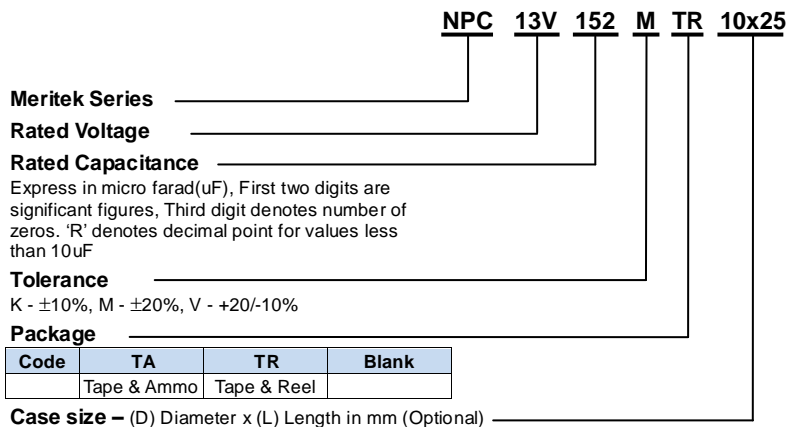
- Suitable for the direction light of automobile and motorcycle



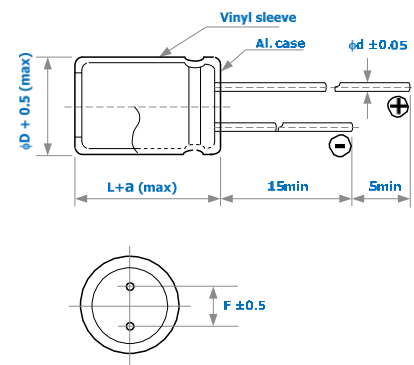
SPECIFICATIONS

Item	Characteristic
Operating Temp Range	- 40 ~ +85°C
Rated Working Voltage	13VDC
Capacitance Tolerance (120Hz 20°C)	± 10%(K) ± 20%(M) +20/-10%(V)
Leakage Current (20°C)	$I \leq 1000(\mu A)$ * Under 100 Ω resistor series and rated voltage applied whichever after 3 minutes I : Leakage Current (μA) C : Rated Capacitance(μF) V : Working Voltage (V)
Dissipation Factor (tan δ) (120Hz 20°C)	tan δ ≤ 0.50

PART NUMBER SYSTEM



DIMENSIONS (mm)



φD	10	12.5
F	5.0	5.0
d	0.6	0.6
a	1.5	1.5

CASE SIZE

Case size: DxL (mm)

Cap. (μF)	V	13
	Item	DxL
1500		10x25
1700		12.5x20
2200		12.5x25

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TAPING SPECIFICATION

- Lead taping is designed for automatic insertion equipment.
- Capacitors with case size of 18mm x 35.5mm or smaller are available in taping type.

DIMENSIONS (Ø4~ Ø10)

Item	Symbol	Case Size																Tolerance	Remark
		4 x 5	5 x 5	6.3x5	8 x 5	4 x 7	5 x 7	6.3x7	8 x 7	5 x 11	6.3x11	8 x 11.5	10x12.5	10x16	10x18	10x20			
Lead wire diameter	d	0.45						0.5				0.6						±0.05	
Body height	A	6.0				8.0				12.5		13	14	17.5	19.5	21.5	MAX		
Intervals of bodies	P	12.7																±1.0	
Intervals of punched holes	P ₀	12.7																±0.2	
Distance between holes and lead wire	P ₁	3.85																±0.7	Fig 1. Fig 4.
		5.35	5.1	5.1			5.35	5.1	5.1			5.1							Fig 2.
		5.6	5.35	5.1	5.1	5.6	5.35	5.1	4.6	5.35	5.1	4.6							Fig 3.
Distance between holes and bodies	P ₂	6.35																±1.0	
Distance between lead and lead	F	5.0																+0.8 -0.2	Fig 1. Fig 4.
		2.0	2.5	2.5			2.0	2.5	2.5			2.5							Fig 2. F ₁ :5.0 ^{+0.5}
		1.5	2.0	2.5	2.5	1.5	2.0	2.5	3.5	2.0	2.5	3.5							Fig 3. F ₁ :5.0 ^{+0.5}
Base tape width	W	18.0																±0.5	
Adhesive tape width	W ₀	12.5																MIN	
Deviation between holes and base tape	W ₁	9.0																±0.5	
Deviation between adhesive and base tape	W ₂	1.5																MAX	
Distance between body bottom and tape center	H	17.5						18.5		20.0	18.5						±0.5	Fig 1. Fig 4.	
		17.5						18.5		18.5								Fig 2. Fig 3.	
Lead wire clinched height	H ₀	16.0																±0.5	
Distance between body top and tape center	H ₁	24.5				27.5				32.5		33.0	36.0	38.0	41.0	MAX			
Punched hole diameter	D ₀	4.0																±0.3	
Length of not good lead slit	L	11.0																MAX	
Base and adhesive tape thickness	t	0.6																±0.3	
Deviation of body alignment	Δh	0																±2.0	
Deviation of body alignment	Δh ₁	0																±1.0	

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DIMENSIONS (Ø12.5~ Ø18)

Item	Symbol	Case Size							Tolerance	Remark
		12.5 x 20	12.5 x 25	12.5 x 30	16 x 25	16 x 31.5	16 x 35.5	18 x 35.5		
Lead wire diameter	d	0.6			0.8				±0.05	
Body height	A	21.5	26.5	31.5	26.5	33	37.0	37.0	MAX	
Intervals of bodies	P	15.0			30.0				±1.0	Fig 5. Fig 6.
Intervals of punched holes	P ₀	15.0							±0.2	
Distance between holes and lead wire	P ₁	5.0			3.75				±0.7	
Distance between holes and bodies	P ₂	7.5							±1.0	
Distance between lead and lead	F	5.0			7.5				+0.8 -0.2	
Base tape width	W	18.0							±0.5	
Adhesive tape width	W ₀	15.0							MIN	
Deviation between holes and base tape	W ₁	9.0							±0.5	
Deviation between adhesive and base tape	W ₂	1.5							MAX	
Distance between body bottom and tape center	H	16.5			18.5				±0.5	Fig 5. Fig 6.
Distance between body top and tape center	H ₁	40.5	45.5	50.5	46.5	53.5	56.5	56.5	MAX	
Punched hole diameter	D ₀	4.0							±0.3	
Length of not good lead slit	L	11.0							MAX	
Base and adhesive tape thickness	t	0.6							±0.3	
Deviation of body alignment	Δh	0							±2.0	
Deviation of body alignment	Δh ₁	0							±1.0	

Fig 1. ($\phi 4 \sim \phi 8$)

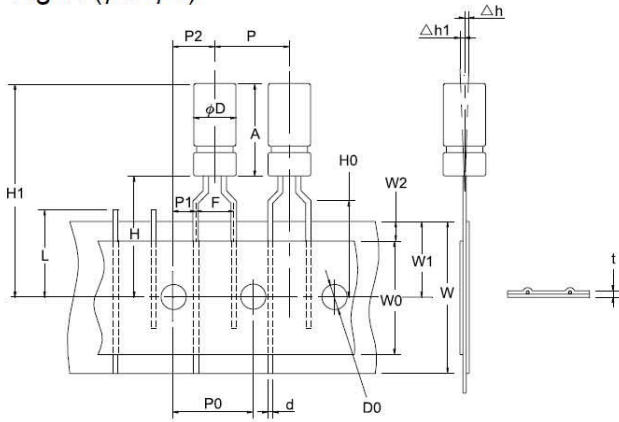


Fig 2. ($\phi 4 \sim \phi 5$)

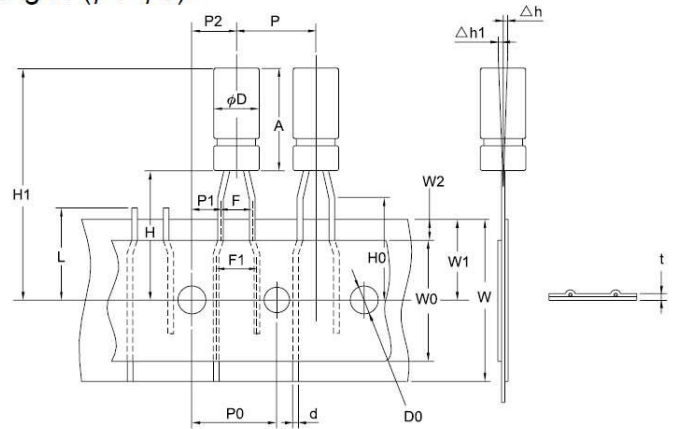


Fig 3. ($\phi 4 \sim \phi 8$)

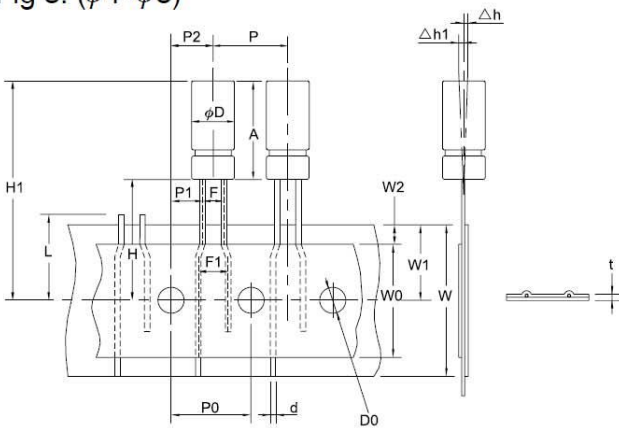


Fig 4. ($\phi 10$)

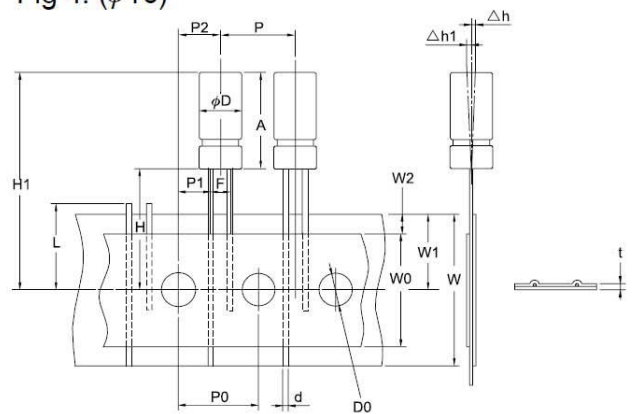


Fig 5. ($\phi 12.5$)

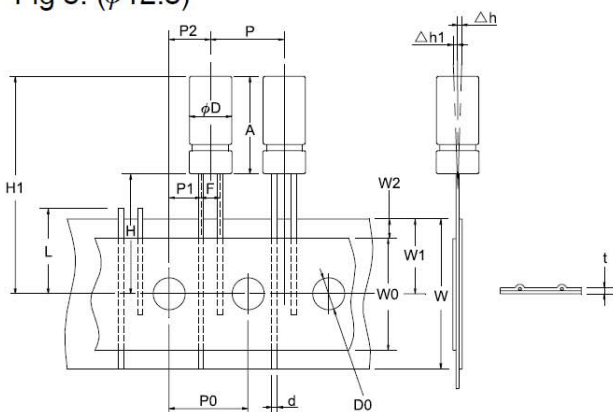
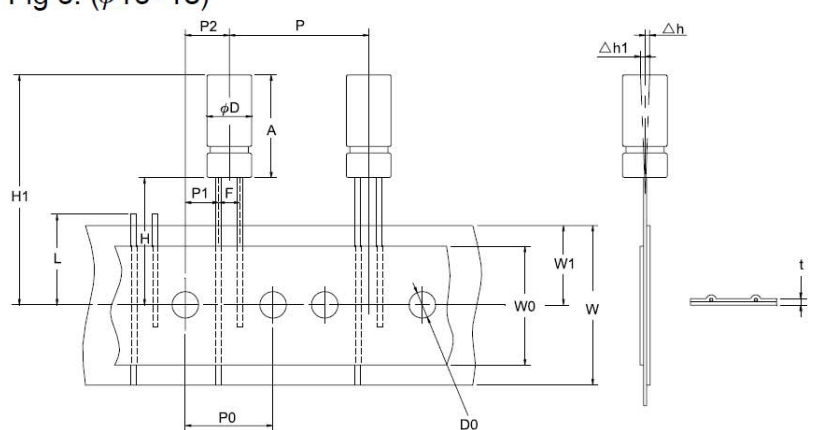


Fig 6. ($\phi 16 \sim 18$)



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SOLDERABILITY

Capacitor lead wire is dipping into the oven, and then, dipping in $245\pm 3^{\circ}\text{C}$, solder liquid for 3 ± 0.5 seconds, the substance is above the liquid solder 2mm, the dipping lead must be adherent 95% fresh tin at least.

RESISTANCE TO SOLDERING HEAT

Put capacitor lead wire to dip $260\pm 5^{\circ}\text{C}$ in solder liquor away the body 2mm, after 10 ± 1 seconds taken out, after 2 hours in room temperature, should do final measurements, the values are following:

- (A) Capacitance change: $\leq \pm 10\%$ of initial value
- (B) Dissipation factor: \leq initial specified value
- (C) Leakage current: \leq initial specified value
- (D) Visual: No damage