

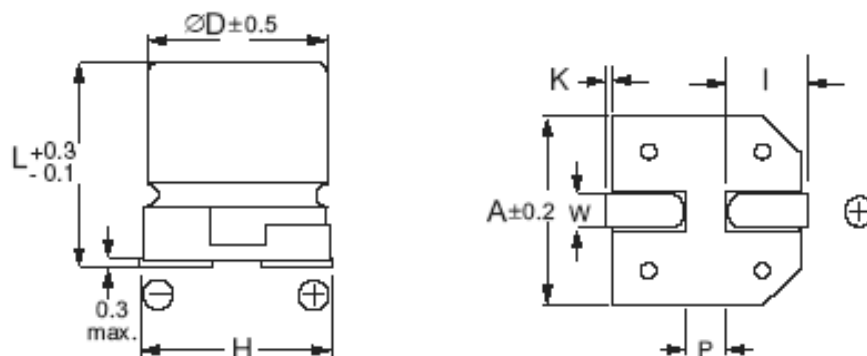
### SMD Aluminum Electrolytic Capacitor-Ultra Low Impedance

#### Features

- Lifetime: 2000 hours at 105°C
- Low profile vertical chip
- Ultra low impedance
- RoHS compliant



#### Dimensions (in mm)



$\varnothing 8 \sim \varnothing 10 \& \varnothing 6.3 \times 7.7 = L \pm 0.3$

Case Code	$\varnothing D \times L$	A	H (Max.)	I	W	P	K
B	4.0x5.4	4.3	5.5	1.8	0.65±0.1	1.0±0.2	0.35+0.15/-0.20
C	5.0x5.4	5.3	6.5	2.2	0.65±0.1	1.5±0.2	0.35+0.15/-0.20
D	6.3x5.4	6.6	7.8	2.6	0.65±0.1	1.8±0.2	0.35+0.15/-0.20
E	6.3x7.7	6.6	7.8	2.6	0.65±0.1	1.8±0.2	0.35+0.15/-0.20
F	8.0x6.2	8.3	9.5	3.4	0.65±0.1	2.2±0.2	0.35+0.15/-0.20
G	8.0x10.2	8.3	10.0	3.4	0.90±0.2	3.1±0.2	0.70±0.20
H	10.0x10.2	10.3	12.0	3.5	0.90±0.2	4.6±0.2	0.70±0.20

# SMD Aluminum Electrolytic Capacitors-Ultra Low Impedance

## TCY Series

### Specification

Description		Value					Conditions
Capacitance Tolerance		M: $\pm 20\%$					at 120Hz, 20 °C
Rated Voltage Range (WV)		6.3 ~ 35 VDC					
Working Voltage Range (WV)		6.3	10	16	25	35	
Surge Voltage (V)		8	13	20	32	44	
Max. Low Temperature Stability Impedance Ratio	Z(-25°C)/ Z(+20°C)	2	2	2	2	2	at 120Hz
	Z(-40°C)/ Z(+20°C)	3	3	3	3	3	
Rated Capacitance Range (C)		4.7 ~ 1500 $\mu$ F					
Operation Temperature Range(TOP)		-40 ~ +105 °C					
Max. Dissipation Factor (tan $\delta$ )		Shown in the table of standard rating					at 120Hz, 20 °C
Max. Leakage Current at 20°C		$\leq 0.01$ CV or 3 $\mu$ A, whichever is greater					After applying rated voltage for 2 minutes
Endurance	Capacitance Change	Within $\pm 30\%$ of the initial value					After applying rated voltage and ripple current for 2000 hours at 105°C
	Dissipation Factor	Not more than 200% of the specified value					
	Leakage Current	Not more than the specified value					
Shelf Life		Shall meet the same requirement as Endurance					After placing at 105°C without applying voltage for 1000 hours

### Multiplier for Ripple Current

Frequency (Hz)	120	1K	10K	100K
Frequency Coefficient	0.70	0.80	0.90	1.00

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### Case Size (mm) / tan $\delta$ / Max. Ripple Current (mA) / Impedance (ohm)

C( $\mu$ F)	Rated (Surge) Voltage											
	6.3(8)				10(13)				16(20)			
	$\Phi$ DxL	tan $\delta^*$	RC**	Z***	$\Phi$ DxL	tan $\delta^*$	RC**	Z***	$\Phi$ DxL	tan $\delta^*$	RC**	Z***
22	4x5.4	0.26	90	1.93	4x5.4	0.19	90	1.93	4x5.4	0.16	90	1.93
									5x5.4	0.16	160	1.00
33	4x5.4	0.26	90	1.93	4x5.4	0.19	90	1.93	5x5.4	0.16	160	1.00
					5x5.4	0.19	160	1.00				
47	4x5.4	0.26	90	1.93	6.3x5.4	0.19	190	0.52	5x5.4	0.16	160	1.00
	5x5.4	0.26	160	1.00					6.3x5.4	0.16	240	0.52
100	5x5.4	0.26	160	1.00	6.3x5.4	0.19	190	0.52	6.3x5.4	0.16	240	0.52
	6.3x5.4	0.26	240	0.52								
150	8x6.2	0.26	240	0.30	6.3x7.7	0.19	240	0.34	6.3x7.7	0.16	280	0.34
220	8x6.2	0.26	240	0.30	6.3x7.7	0.19	280	0.34	8x10.2	0.16	370	0.22
					8x6.2	0.19	300	0.26				
330	6.3x7.7	0.26	280	0.34	8x10.2	0.19	600	0.16	8x10.2	0.16	600	0.16
	8x6.2	0.26	300	0.26								
470	8x10.2	0.26	600	0.16	8x10.2	0.19	600	0.16	8x10.2	0.16	600	0.16
680	8x10.2	0.26	600	0.16	10x10.2	0.19	600	0.12	10x10.2	0.16	850	0.08
1000	8x10.2	0.26	600	0.16								
1500	10x10.2	0.26	850	0.08								

C( $\mu$ F)	Rated (Surge) Voltage							
	25(32)				35(44)			
	$\Phi$ DxL	tan $\delta^*$	RC**	Z***	$\Phi$ DxL	tan $\delta^*$	RC**	Z***
4.7					4x5.4	0.12	90	1.93
10	4x5.4	0.14	90	1.93	4x5.4	0.12	90	1.93
					5x5.4	0.12	160	1.00
22	5x5.4	0.14	160	1.00	5x5.4	0.12	160	1.00
33	5x5.4	0.14	160	1.00	6.3x5.4	0.12	240	0.52
	6.3x5.4	0.14	240	0.52				
47	6.3x5.4	0.14	240	0.52	6.3x5.4	0.12	240	0.52
68	6.3x5.4	0.14	240	0.52	6.3x7.7	0.12	280	0.34
100	6.3x7.7	0.14	280	0.34	8x10.2	0.12	600	0.16
	8x6.2	0.14	300	0.26				
150	8x10.2	0.14	600	0.16	8x10.2	0.12	600	0.16
220	8x10.2	0.14	600	0.16	10x10.2	0.12	600	0.16
330	10x10.2	0.14	600	0.16	10x10.2	0.12	850	0.08
470	10x10.2	0.14	850	0.08				

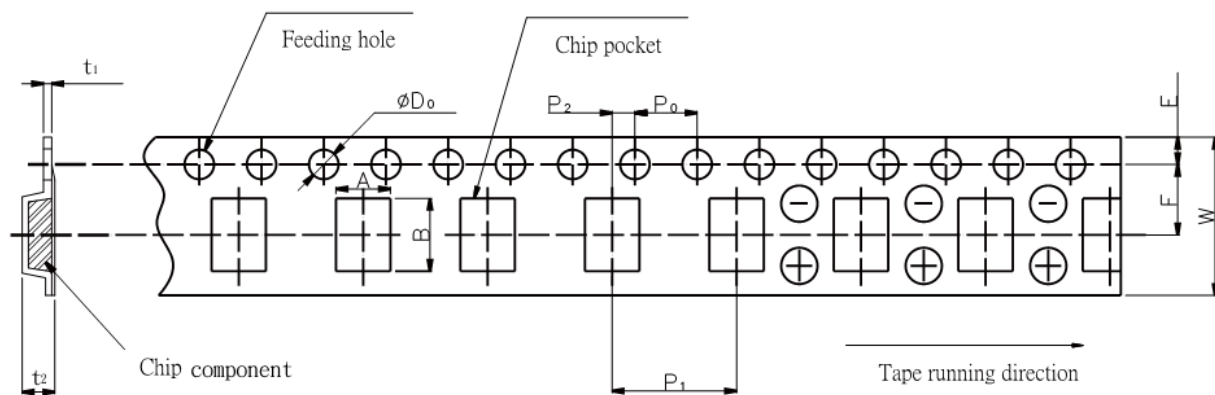
# SMD Aluminum Electrolytic Capacitors-Ultra Low Impedance

## TCY Series

**Note:** \*Max. Dissipation Factor:  $\tan \delta$  at 120Hz, 20°C  
 \*\*Max. Permissible Ripple Current in mA(RMS)/100KHz, 105°C  
 \*\*\*Max. Impedance:  $Z(\Omega)$ /100KHz, 20°C

### Packing Information:

#### Carrier Tape Dimensions (in mm)

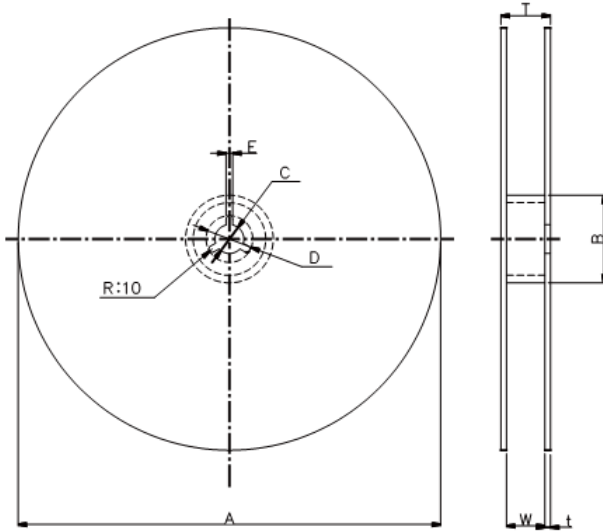


Symbol Size	A	B	E	F	W	P0±0.1	P1	P2±0.1	ΦD0	t1	t2
4.0x5.4	4.7	4.7	1.75	5.5	12.0	4.0	8.0	2.0	1.5+0.1-0	0.4	5.8
5.0x5.4	5.7	5.7	1.75	5.5	12.0	4.0	12.0	2.0	1.5+0.1-0	0.4	5.8
6.3x5.4	7.0	7.0	1.75	7.5	16.0	4.0	12.0	2.0	1.5+0.1-0	0.4	5.8
6.3x7.7	7.0	7.0	1.75	7.5	16.0	4.0	12.0	2.0	1.5+0.1-0	0.4	8.3
8.0x6.2	8.7	8.7	1.75	7.5	16.0	4.0	12.0	2.0	1.5+0.1-0	0.4	6.8
8.0x10.2	8.7	8.7	1.75	11.5	24.0	4.0	16.0	2.0	1.5+0.1-0	0.4	11.0
10.0x10.2	10.7	10.7	1.75	11.5	24.0	4.0	16.0	2.0	1.5+0.1-0	0.4	11.0

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### Reel Dimensions (in mm)



Size	A	B	C	D	E	W	T	t
4Φ ~ 5Φ	380±2	50min	13.0±0.5	21.0±0.8	2.0±0.5	14±1	20±1	3.0
6.3Φ ~ 8x6.2	380±2	50min	13.0±0.5	21.0±0.8	2.0±0.5	18±1	24±1	3.0
8x10.2 ~ 10Φ	380±2	50min	13.0±0.5	21.0±0.8	2.0±0.5	26±1	32±1	3.0

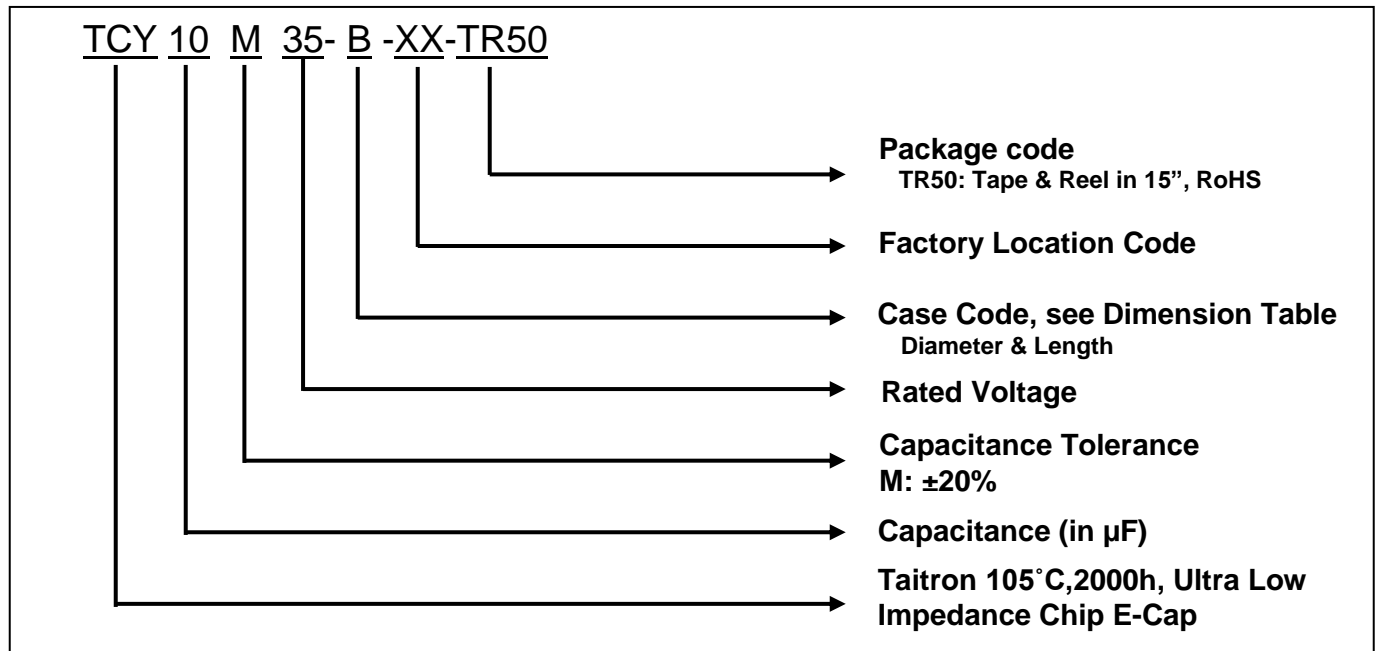
### Carton Information

Size(mm)	Q'ty per reel	Inner box / measurement (mm)		Out carton / measurement (mm)	
4.0x5.4	2000	20,000	390x195x395	40,000	420x410x414
5.0x5.4	1000	10,000	390x195x395	20,000	420x410x414
6.3x5.4 & 6.3x7.7	1000	10,000	390x235x405	20,000	420x410x492
8.0x6.2	1000	10,000	390x235x405	20,000	420x410x492
8.0x10.2	500	4,000	390x255x405	8,000	420x410x530
10.0x10.2	500	4,000	390x255x405	8,000	420x410x530

# SMD Aluminum Electrolytic Capacitors-Ultra Low Impedance

## TCY Series

### How to Order:



### How to contact us

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