# **Aluminum Electrolytic Capacitors**

# Radial Lead Type

**TA-A** series



#### **Features**

● Endurance : 125 °C 2000 h

● Heat cycle: 1000 cycle –40 °C to +125 °C

AEC-Q200 compliant

RoHS compliant

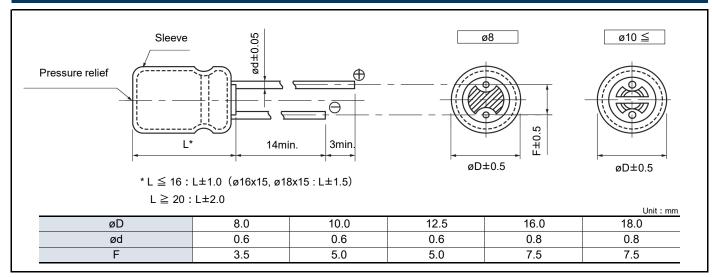
#### **Specifications**

Category temp. range	–40 ℃ to +125 ℃									
Rated voltage range	10 V to 63 V									
Capacitance range	2.2 μF to 4700 μF									
Capacitance tolerance	±20 % (120 Hz / +20℃)									
Leakage current	I ≤ 0.01 CV or 3 (μA) After 2 minutes (Whichever is greater)									
Dissipation factor (tan δ)	Rated voltage (V)	10	16	25	35	50	63	(120 H→ /+20°C)		
	Dissipation factor (tan δ)	0.20	0.16	0.14	0.12	0.10	0.09	(120 Hz /+20℃)		
	For capacitance value ≧ 1000 μF , add 0.02 per every 1000 μF.									
	After following life test with DC voltage and +125 °C±2 °C ripple current value applied									
	(The sum of DC and ripple peak voltage shall not exceed the rated working voltage) for 2000 h,									
Endurance	when the capacitors are restored to 20 °C, the capacitors shall meet the limits specified bellow.									
Liidulalice	Capacitance change Within ±30 % of the initial value									
	Dissipation factor (tan δ)	≦ 300 €	≦ 300 % of the initial limit							
	DC leakage current Within the initial limit									
	After storage for 1000 h at +125 ℃±2 ℃ with no voltage applied and then being									
Shelf life	stabilized at +20 ℃, capacitors shall meet the limits specified in endurance.									
	(With voltage treatment)									

### Frequency correction factor for ripple current

Freq. (Hz)	60	120	1 k	10 k	100 k
2.2 to 330	0.55	0.65	0.85	0.90	1.00
470 to 1000	0.70	0.75	0.90	0.95	1.00
2200 to 4700	0.75	0.80	0.90	0.95	1.00

### **Dimensions**



## **Characteristics list**

Endurance : 125 ℃ 2000 h

Rated voltage (V)	Capacitance (±20 %) (μF)	Case size (mm)		Specification		Lead length (mm)				Min. Packaging Q'ty (PCS)	
		øD	L	Ripple current <sup>*1</sup> (mA rms)	Impe- dance <sup>*2</sup> (Ω)	Lead dia. (ød)	Straight	space Taping *B	Part No.	Strai- ght leads	Taping
-	330	8.0	11.5	500	0.130	0.6	3.5	5.0	EEUTA1A331( )	200	1000
	470	10.0	12.5	680	0.100	0.6	5.0	5.0	EEUTA1A471( )	200	500
	1000	10.0	20.0	1100	0.057	0.6	5.0	5.0	EEUTA1A102( )	200	500
		12.5	15.0	1085	0.070	0.6	5.0	5.0	EEUTA1A102S( )	200	500
	2200	12.5	25.0	1750	0.033	0.6	5.0	5.0	EEUTA1A222L( )	200	500
10		16.0	20.0	1985	0.032	8.0	7.5	7.5	EEUTA1A222( )	100	250
		18.0	15.0	1800	0.042	8.0	7.5	7.5	EEUTA1A222S( )	100	250
	3300	16.0	25.0	2300	0.024	0.8	7.5	7.5	EEUTA1A332( )	100	250
	3300	18.0	20.0	2250	0.031	0.8	7.5	7.5	EEUTA1A332S( )	100	250
	4700	16.0	31.5	2710	0.020	8.0	7.5	_	EEUTA1A472	100	_
	4700	18.0	25.0	2470	0.022	8.0	7.5	7.5	EEUTA1A472S( )	100	250
	220	8.0	11.5	500	0.130	0.6	3.5	5.0	EEUTA1C221( )	200	1000
16	330	10.0	12.5	680	0.100	0.6	5.0	5.0	EEUTA1C331( )	200	500
	470	10.0	16.0	945	0.075	0.6	5.0	5.0	EEUTA1C471( )	200	500
	1000	12.5	20.0	1490	0.042	0.6	5.0	5.0	EEUTA1C102( )	200	500
		16.0	15.0	1520	0.047	0.8	7.5	7.5	EEUTA1C102S( )	100	250
	2200	16.0	25.0	2300	0.024	0.8	7.5	7.5	EEUTA1C222( )	100	250
		18.0	20.0	2250	0.031	0.8	7.5	7.5	EEUTA1C222S( )	100	250
	3300	16.0	31.5	2710	0.020	0.8	7.5	_	EEUTA1C332	100	_
		18.0	25.0	2470	0.022	0.8	7.5	7.5	EEUTA1C332S( )	100	250
	4700	18.0	31.5	3270	0.018	0.8	7.5	_	EEUTA1C472	50	_
-	100	8.0	11.5	500	0.130	0.6	3.5	5.0	EEUTA1E101( )	200	1000
	220	10.0	12.5	680	0.100	0.6	5.0	5.0	EEUTA1E221( )	200	500
	330	10.0	16.0	945	0.075	0.6	5.0	5.0	EEUTA1E331()	200	500
	470	10.0	20.0	1100	0.057	0.6	5.0	5.0	EEUTA1E471( )	200	500
		12.5	15.0	1085	0.070	0.6	5.0	5.0	EEUTA1E471S( )	200	500
25	1000	12.5	25.0	1750	0.033	0.6	5.0	5.0	EEUTA1E102L( )	200	500
		16.0	20.0	1985	0.032	0.8	7.5	7.5	EEUTA1E102( )	100	250
		18.0	15.0	1800	0.042	0.8	7.5	7.5	EEUTA1E102S( )	100	250
		16.0	31.5	2710	0.020	0.8	7.5	_	EEUTA1E222	100	_
	2200	18.0	25.0	2470	0.022	0.8	7.5	7.5	EEUTA1E222S( )	100	250
	3300	18.0	35.5	3310	0.017	0.8	7.5	_	EEUTA1E332	50	_
-	100	10.0	12.5	555	0.180	0.6	5.0	5.0	EEUTA1V101( )	200	500
35	220	10.0	16.0	765	0.130	0.6	5.0	5.0	EEUTA1V221( )	200	500
	330	10.0	20.0	930	0.100	0.6	5.0	5.0	EEUTA1V331( )	200	500
	470	12.5	20.0	1330	0.070	0.6	5.0	5.0	EEUTA1V471( )	200	500
		16.0	15.0	1450	0.088	0.8	7.5	7.5	EEUTA1V471S( )	100	250
	1000	16.0	25.0	2010	0.037	0.8	7.5	7.5	EEUTA1V102( )	100	250
		18.0	20.0	2180	0.046	0.8	7.5	7.5	EEUTA1V102S( )	100	250
	2200	18.0	35.5	2790	0.025	0.8	7.5	_	EEUTA1V222	50	_

<sup>\*1:</sup> Ripple current (100 kHz / +125  $^{\circ}$ C)

<sup>\*2:</sup> Impedance (100 kHz / +20  $^{\circ}$ C)

 $<sup>\</sup>boldsymbol{\cdot}$  When requesting taped product, please put the letter "B" be tween the "( )". Lead wire pitch **\***B=5 mm, 7.5 mm.

<sup>•</sup> Please refer to the page of "Taping dimensions".

## **Characteristics list**

Endurance : 125 ℃ 2000 h

voltage (±20 % (µF)	Capacitance (±20 %) (µF)	Case size (mm)		Specification		Lead length (mm)				Min. Packaging Q'ty (PCS)	
		øD	L	Ripple current <sup>*1</sup> (mA rms)	Impe- dance <sup>*2</sup> (Ω)	Lead dia. (ød)	Lead	space Taping *B	Part No.	Strai- ght leads	Taping
	10	8.0	11.5	180	0.950	0.6	3.5	5.0	EEUTA1H100( )	200	1000
	22	8.0	11.5	250	0.650	0.6	3.5	5.0	EEUTA1H220( )	200	1000
	33	8.0	11.5	300	0.450	0.6	3.5	5.0	EEUTA1H330( )	200	1000
	47	8.0	11.5	440	0.350	0.6	3.5	5.0	EEUTA1H470S( )	200	1000
50	100	10.0	12.5	555	0.180	0.6	5.0	5.0	EEUTA1H101( )	200	500
	220	10.0	20.0	930	0.100	0.6	5.0	5.0	EEUTA1H221( )	200	500
	000	12.5	20.0	1330	0.070	0.6	5.0	5.0	EEUTA1H331( )	200	500
	330	16.0	15.0	1450	0.088	0.8	7.5	7.5	EEUTA1H331S( )	100	250
	470	12.5	25.0	1650	0.055	0.6	5.0	5.0	EEUTA1H471L( )	200	500
		16.0	20.0	1650	0.053	0.8	7.5	7.5	EEUTA1H471( )	100	250
		18.0	15.0	1710	0.075	0.8	7.5	7.5	EEUTA1H471S( )	100	250
	1000	16.0	31.5	2430	0.031	0.8	7.5	_	EEUTA1H102	100	_
		18.0	25.0	2350	0.032	0.8	7.5	7.5	EEUTA1H102S( )	100	250
	22	8.0	11.5	310	0.470	0.6	3.5	5.0	EEUTA1J220( )	200	1000
63	33	10.0	12.5	410	0.360	0.6	5.0	5.0	EEUTA1J330( )	200	500
	47	10.0	16.0	460	0.270	0.6	5.0	5.0	EEUTA1J470( )	200	500
	100	10.0	20.0	680	0.205	0.6	5.0	5.0	EEUTA1J101( )	200	500
		12.5	25.0	1325	0.100	0.6	5.0	5.0	EEUTA1J221L( )	200	500
	220	16.0	20.0	1360	0.085	0.8	7.5	7.5	EEUTA1J221( )	100	250
		18.0	15.0	1300	0.120	0.8	7.5	7.5	EEUTA1J221S( )	100	250
	330	16.0	25.0	1660	0.070	0.8	7.5	7.5	EEUTA1J331()	100	250
		18.0	20.0	1760	0.077	0.8	7.5	7.5	EEUTA1J331S( )	100	250
	470	16.0	31.5	2055	0.060	0.8	7.5	_	EEUTA1J471	100	_
		18.0	25.0	1990	0.060	8.0	7.5	7.5	EEUTA1J471S( )	100	250

<sup>\*1:</sup> Ripple current (100 kHz / +125 ℃)

<sup>\*2:</sup> Impedance (100 kHz / +20 ℃)

<sup>•</sup> When requesting taped product, please put the letter "B" be tween the "( )". Lead wire pitch **\***B=5 mm, 7.5 mm.

<sup>•</sup> Please refer to the page of "Taping dimensions".