

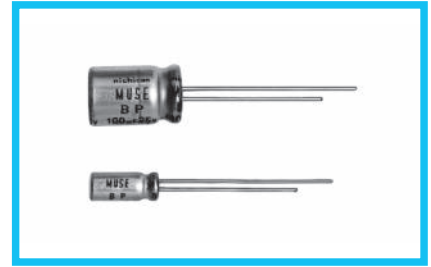
# ALUMINUM ELECTROLYTIC CAPACITORS



Bi-Polarized, For Audio Equipment



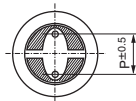
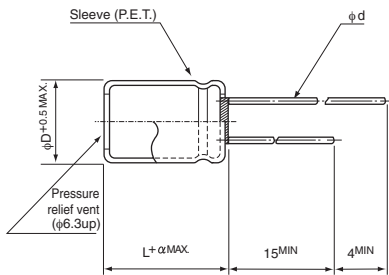
- Bi-polarized “nichicon MUSE” acoustic series.
- Suited for audio signal circuits.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).



## Specifications

Item	Performance Characteristics							
Category Temperature Range	-40 to +85°C							
Rated Voltage Range	6.3 to 50V							
Rated Capacitance Range	1 to 1000μF							
Capacitance Tolerance	±20% at 120Hz, 20°C							
Leakage Current	After 1 minute's application of rated voltage at 20°C, leakage current is not more than 0.03CV or 3 (μA), whichever is greater.							
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C							
	Rated voltage (V)	6.3	10	16	25	35	50	
	tan δ (MAX.)	0.24	0.20	0.16	0.16	0.14	0.12	
Stability at Low Temperature	Measurement frequency : 120Hz							
	Rated voltage (V)		6.3	10	16	25	35	50
	Impedance ratio (MAX.)	Z-25°C / Z+20°C	4	3	2	2	2	2
Z-40°C / Z+20°C		8	6	4	4	4	4	
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 85°C with the polarity inverted every 250 hours.						Capacitance change	Within ±20% of the initial capacitance value
							tan δ	150% or less than the initial specified value
							Leakage current	Less than or equal to the initial specified value
Shelf Life	After storing the capacitors under no load at 85°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above.							
Marking	Printed with black color letter on clear green sleeve.							

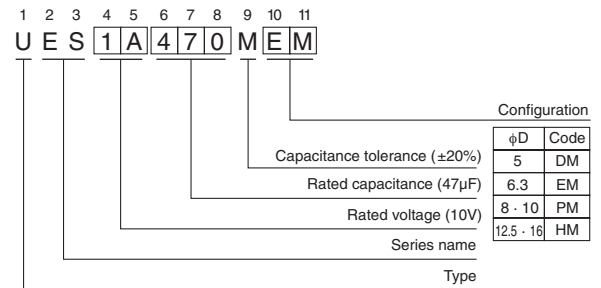
## Radial Lead Type



	(mm)					
φD	5	6.3	8	10	12.5	16
P	2.0	2.5	3.5	5.0	5.0	7.5
φd	0.6	0.6	0.6	0.6	0.8	0.8

α	(φD < 8)	1.0
	(φD ≥ 8)	1.5

## Type numbering system (Example : 10V 47μF)



Configuration	φD	Code
	5	DM
	6.3	EM
	8 - 10	PM
	12.5 - 16	HM

- Please refer to the Guidelines for Aluminum Electrolytic Capacitors for end seal configuration information.

● Dimension table in next page.

UES

## ■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20°C after 1 minute)	Part Number
6.3 (0J)	33	5×11	0.24	6.237	UES0J330MDM
	47	6.3×11	0.24	8.883	UES0J470MEM
	100	8×11.5	0.24	18.9	UES0J101MPM
	220	10×12.5	0.24	41.58	UES0J221MPM
	330	10×16	0.24	62.37	UES0J331MPM
	470	10×20	0.24	88.83	UES0J471MPM
	1000	12.5×25	0.24	189	UES0J102MHM
10 (1A)	22	5×11	0.20	6.6	UES1A220MDM
	33	6.3×11	0.20	9.9	UES1A330MEM
	47	6.3×11	0.20	14.1	UES1A470MEM
	100	10×12.5	0.20	30	UES1A101MPM
	220	10×16	0.20	66	UES1A221MPM
	330	10×20	0.20	99	UES1A331MPM
	470	12.5×20	0.20	141	UES1A471MHM
16 (1C)	1000	16×25	0.20	300	UES1A102MHM
	10	5×11	0.16	4.8	UES1C100MDM
	22	6.3×11	0.16	10.56	UES1C220MEM
	33	6.3×11	0.16	15.84	UES1C330MEM
	47	8×11.5	0.16	22.56	UES1C470MPM
	100	10×12.5	0.16	48	UES1C101MPM
	220	10×20	0.16	105.6	UES1C221MPM
	330	12.5×20	0.16	158.4	UES1C331MHM
	470	12.5×25	0.16	225.6	UES1C471MHM
1000	16×25	0.16	480	UES1C102MHM	
25 (1E)	4.7	5×11	0.16	3.525	UES1E4R7MDM
	10	5×11	0.16	7.5	UES1E100MDM
	22	6.3×11	0.16	16.5	UES1E220MEM
	33	8×11.5	0.16	24.75	UES1E330MPM
	47	10×12.5	0.16	35.25	UES1E470MPM
	100	10×16	0.16	75	UES1E101MPM
	220	12.5×25	0.16	165	UES1E221MHM
	330	12.5×25	0.16	247.5	UES1E331MHM
	470	16×25	0.16	352.5	UES1E471MHM
1000	16×31.5	0.16	750	UES1E102MHM	
35 (1V)	4.7	5×11	0.14	4.935	UES1V4R7MDM
	10	6.3×11	0.14	10.5	UES1V100MEM
	22	8×11.5	0.14	23.1	UES1V220MPM
	33	10×12.5	0.14	34.65	UES1V330MPM
	47	10×12.5	0.14	49.35	UES1V470MPM
	100	10×20	0.14	105	UES1V101MPM
	220	12.5×25	0.14	231	UES1V221MHM
	330	16×25	0.14	346.5	UES1V331MHM
	470	16×25	0.14	493.5	UES1V471MHM

For cut leads, formed leads or taped parts, please add the appropriate code after the size code (12th digit).  
If there is no size code in the part number, please add size code "1" and then add the appropriate code.

## UES

## ■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance ( $\mu$ F)	Case Size $\phi$ D $\times$ L (mm)	tan $\delta$	Leakage Current ( $\mu$ A) (at 20°C after 1 minute)	Part Number
50 (1H)	1	5 $\times$ 11	0.12	3	UES1H010MDM
	2.2	5 $\times$ 11	0.12	3.3	UES1H2R2MDM
	3.3	5 $\times$ 11	0.12	4.95	UES1H3R3MDM
	4.7	6.3 $\times$ 11	0.12	7.05	UES1H4R7MEM
	10	8 $\times$ 11.5	0.12	15	UES1H100MPM
	22	10 $\times$ 12.5	0.12	33	UES1H220MPM
	33	10 $\times$ 16	0.12	49.5	UES1H330MPM
	47	10 $\times$ 20	0.12	70.5	UES1H470MPM
	100	12.5 $\times$ 25	0.12	150	UES1H101MHM
	220	16 $\times$ 25	0.12	330	UES1H221MHM
330	16 $\times$ 31.5	0.12	495	UES1H331MHM	

For cut leads, formed leads or taped parts, please add the appropriate code after the size code (12th digit).  
If there is no size code in the part number, please add size code "1" and then add the appropriate code.

- For formed lead or taped product specifications and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.