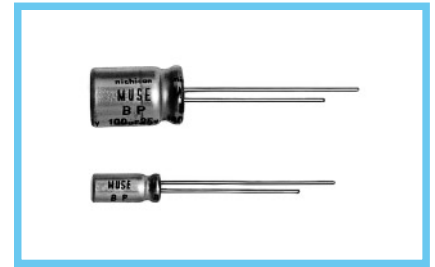
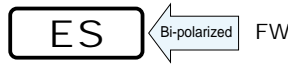


ALUMINUM ELECTROLYTIC CAPACITORS

nichicon MUSE ES series Bi-Polarized, For Audio Equipment



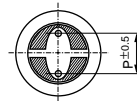
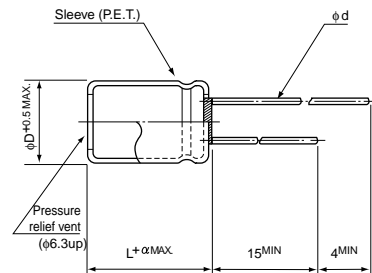
- Bi-polarized "nichicon MUSE" acoustic series.
- Suited for audio signal circuits.
- Adapted to the RoHS directive (2002/95/EC).



Specifications

Item	Performance Characteristics							
Category Temperature Range	-40 to +85°C							
Rated Voltage Range	6.3 to 50V							
Rated Capacitance Range	0.47 to 1000μF							
Capacitance Tolerance	±20% at 120Hz, 20°C							
Leakage Current	After 1 minute's application of rated voltage, leakage current is not more than 0.03CV or 3 (μA), whichever is greater.							
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz, Temperature : 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 ZT / Z20 (MAX.)	Z-25°C / Z+20°C	4	3	2	2	2	2
		Z-40°C / Z+20°C	8	6	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 initial value						
	tan δ	150% or less of 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 after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will meet the specified value for endurance characteristics listed above.							
Marking	Printed with black color letter on clear green sleeve.							

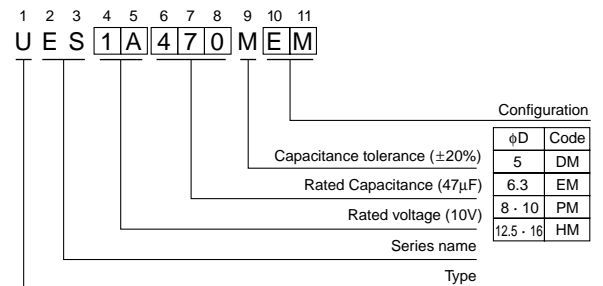
Radial Lead Type



	(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 < 10)	1.0
	(φD ≥ 10)	1.5

Type numbering system (Example : 10V 47μF)



• Please refer to page 20 about the end seal configuration.

Dimensions

V		φD × L (mm)					
Cap. (μF)	Code	6.3	10	16	25	35	50
		0J	1A	1C	1E	1V	1H
0.47	R47						5 × 11
1	010						5 × 11
2.2	2R2						5 × 11
3.3	3R3						5 × 11
4.7	4R7						5 × 11
10	100			5 × 11	5 × 11	5 × 11	6.3 × 11
22	220		5 × 11	6.3 × 11	6.3 × 11	8 × 11.5	10 × 12.5
33	330	5 × 11	6.3 × 11	6.3 × 11	8 × 11.5	10 × 12.5	10 × 16
47	470	6.3 × 11	6.3 × 11	8 × 11.5	10 × 12.5	10 × 12.5	10 × 20
100	101	8 × 11.5	10 × 12.5	10 × 12.5	10 × 16	10 × 20	12.5 × 25
220	221	10 × 12.5	10 × 16	10 × 20	12.5 × 25	12.5 × 25	16 × 25
330	331	10 × 16	10 × 20	12.5 × 20	12.5 × 25	16 × 25	16 × 31.5
470	471	10 × 20	12.5 × 20	12.5 × 25	16 × 25	16 × 25	
1000	102	12.5 × 25	16 × 25	16 × 25	16 × 31.5		

Please refer to page 20, 21, 22 about the formed or taped product spec.
Please refer to page 4 for the minimum order quantity.