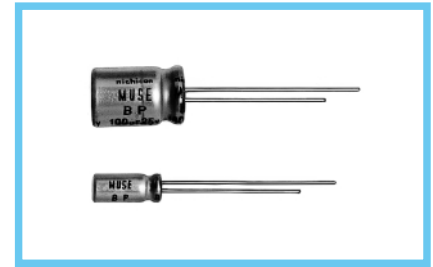
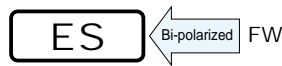


**nichicon MUSE ES** series Bi-Polarized, For Audio Equipment



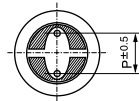
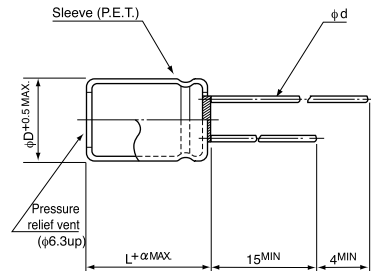
- Bi-polarized "nichicon MUSE" acoustic series.
- Suited for audio signal circuits.
- Adapted to the RoHS directive (2002/95/EC).



## Specifications

Item	Performance Characteristics						
Category Temperature Range	-40 ~ +85°C						
Rated Voltage Range	6.3 ~ 50V						
Rated Capacitance Range	0.47 ~ 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.						
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 Z-25°C / Z+20°C	4	3	2	2	2	2
	ZT / Z20 (MAX.)	Z-40°C / Z+20°C	8	6	4	4	4
Endurance	After 1000 hours' application of rated voltage at 85°C with the polarity inverted every 250 hours, capacitors meet the characteristics requirement listed at right.						
	Capacitance change	Within ±20% of initial value					
	tan δ	150% or less of 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.						
	Leakage current	Initial specified value or less					
Marking	Printed with black color letter on clear green sleeve.						

## Radial Lead Type

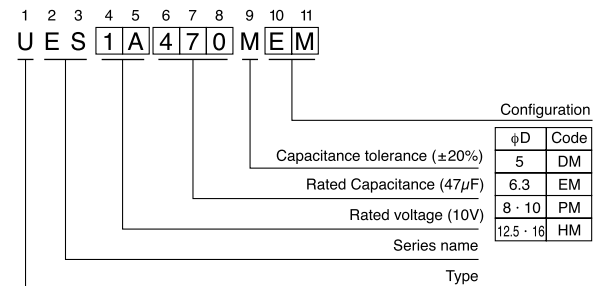


	5	6.3	8	10	12.5	16
φD (mm)	5	6.3	8	10	12.5	16
P (mm)	2.0	2.5	3.5	5.0	5.0	7.5
φd (mm)	0.6	0.6	0.6	0.6	0.8	0.8

α	(φD < 10)	1.0
	(φD ≥ 10)	1.5

- Please refer to page 21 about the end seal configuration.

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



## Dimensions

V		6.3	10	16	25	35	50
Cap. (μF)	Code	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						6.3×11
10	100			5×11	5×11	6.3×11	8×11.5
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 21, 22, 23 about the formed or taped product spec.  
Please refer to page 3 for the minimum order quantity.