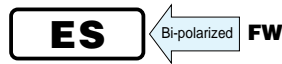


ALUMINUM ELECTROLYTIC CAPACITORS

nichicon MUSE ES series Bi-Polarized, For Audio Equipment



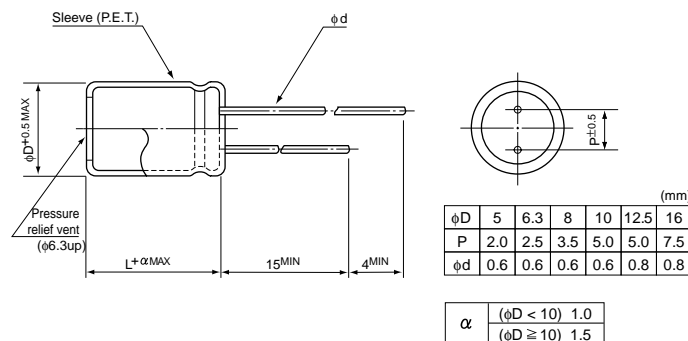
- Bi-polarized “nichicon MUSE” acoustic series.
- Suited for audio signal circuits.
- Adapted to the RoHS directive (2002/95/EC).



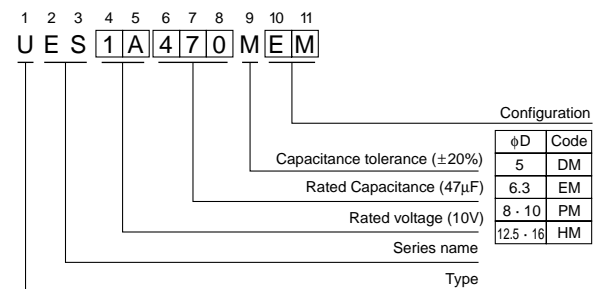
Specifications

Item	Performance Characteristics						
Category Temperature Range	-40 ~ +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 leaving capacitors under no load at 85°C for 1000 hours, they 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



Type numbering system (Example : 10V 47μF)



Dimensions

Cap. (μF)	Code	φD × L (mm)					
		6.3	10	16	25	35	50
0.47	R47	0J	1A	1C	1E	1V	1H
1	010						5 × 11
2.2	2R2						5 × 11
3.3	3R3						5 × 11
4.7	4R7				5 × 11	5 × 11	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.