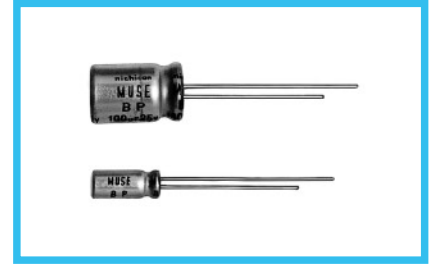
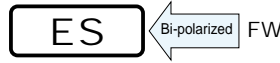


ALUMINUM ELECTROLYTIC CAPACITORS

nichicon MUSE ES Bi-Polarized, For Audio Equipment series



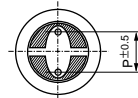
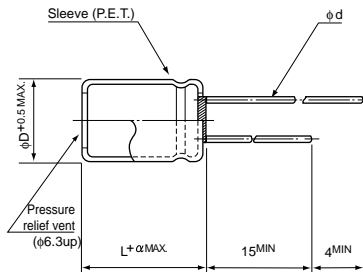
- Bi-polarized "nichicon MUSE" acoustic series.
- Suited for audio signal circuits.
- Compliant to the RoHS directive (2002/95/EC).



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	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.				<table border="1"> <tr> <td>Capacitance change</td> <td colspan="2">Within ±20% of the initial capacitance value</td> </tr> <tr> <td>tan δ</td> <td colspan="2">150% or less than the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td colspan="2">Less than or equal to the initial specified value</td> </tr> </table>			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	
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



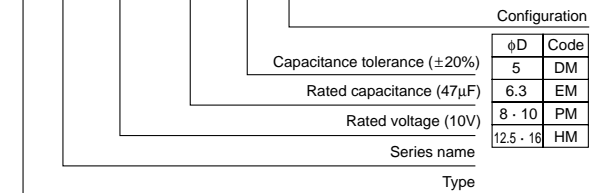
	(mm)					
φD	5	6.3	8	10	12.5	16
P	2.0	2.5	3.5	5.0	5.0	7.5
φd	0.6	0.6	0.6	0.6	0.8	0.8

α	φD < 10	1.0
	φD ≥ 10	1.5

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

Type numbering system (Example : 10V 47μF)

1 2 3 4 5 6 7 8 9 10 11
U E S 1 A 4 7 0 M E M



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						5×11
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 20, 21, 22 about the formed or taped product spec.
 Please refer to page 4 for the minimum order quantity.