ALUMINUM ELECTROLYTIC CAPACITORS

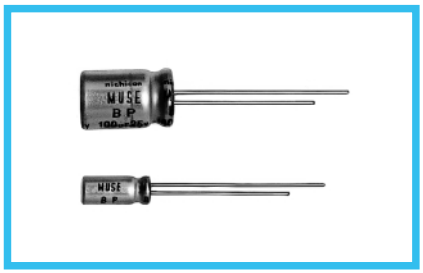
nichicon

nichicon MUSE ES series

Bi-Polarized, For Audio Equipment

For Audio Use | Bi-polarized | Anti-Solvent Feature

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



ES — Bi-polarized — FW

■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 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 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.

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

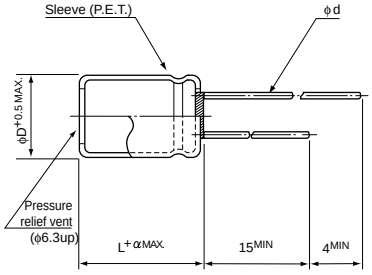
Shelf Life

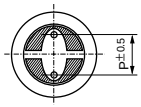
After storing the capacitors under no load at 85°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above.

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

Configuration

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

Capacitance tolerance (±20%)
Rated capacitance (47μF)
Rated voltage (10V)
Series name
Type

■Dimensions

φD×L (mm)

Cap.(μF) \ V	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	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 20, 21, 22 about the formed or taped product spec.
Please refer to page 4 for the minimum order quantity.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Nichicon:

UES1A331MPJ UES1C100MDJ UES1C471MHJ UES0J101MPJ UES1C102MHJ UES1V100MEJ UES1E220MEJ UES1H101MHJ UES0J101MPM UES0J102MHM UES0J221MPM UES0J330MDM UES0J331MPM UES0J470MEM UES0J471MPM UES1A101MPM UES1A102MHM UES1A220MDM UES1A221MPM UES1A330MEM UES1A331MPM UES1A470MEM UES1A471MHM UES1C100MDM UES1C101MPM UES1C102MHM UES1C220MEM UES1C221MPM UES1C330MEM UES1C331MHM UES1C470MPM UES1C471MHM UES1E100MDM UES1E101MPM UES1E102MHM UES1E221MHM UES1E330MPM UES1E331MHM UES1E470MPM UES1E471MHM UES1E4R7MDM UES1H010MDM UES1H100MPM UES1H220MPM UES1H221MHM UES1H2R2MDM UES1H330MPM UES1H331MHM UES1H3R3MDM UES1H470MPM UES1H4R7MEM UES1HR47MDM UES1V101MPM UES1V220MPM UES1V221MHM UES1V330MPM UES1V331MHM UES1V470MPM UES1V471MHM UES1V4R7MDM UES1V470MPH UES1H101MHM UES1E220MEM UES1V100MEM UES0J471MHM UES1H330MPM1TD UES1V101MPM1TD UES1A221MPM1TD UES1E100MDM1TD UES1H470MPM1TD UES0J331MPM1TD UES1C470MPM1TD UES0J102MHM1TO UES1V330MPM1TD UES1C331MHM1TO UES1A331MPM1TD UES1V4R7MDM1TD UES1H100MPM1TD UES1C221MPM1TD UES1E101MPM1TD UES1C102MHM1TO UES1H3R3MDM1TD