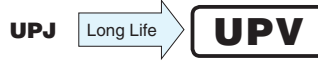
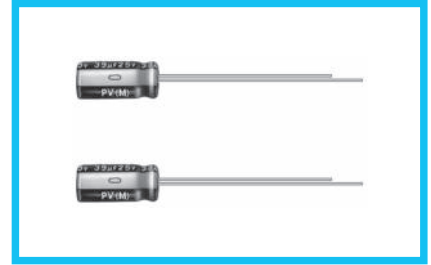


ALUMINUM ELECTROLYTIC CAPACITORS

UPV Miniature Sized, Low Impedance,
High Reliability



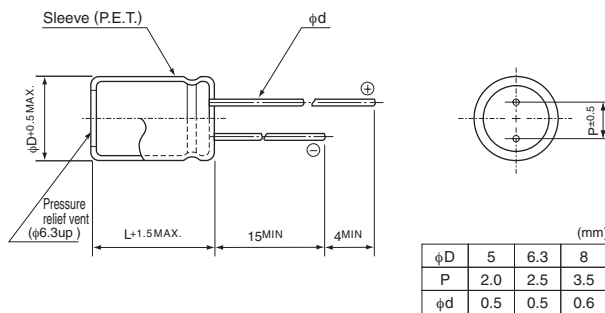
- Miniature sized low impedance series withstanding 5000 hours load life at +105°C.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).



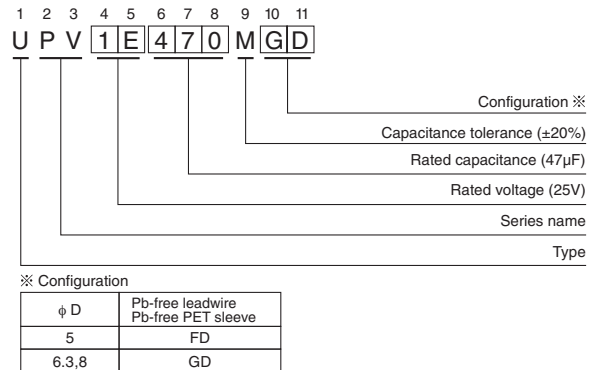
Specifications

Item	Performance Characteristics								
Category Temperature Range	-55 to +105°C								
Rated Voltage Range	6.3 to 50V								
Rated Capacitance Range	1.5 to 390µF								
Capacitance Tolerance	±20% at 120Hz, 20°C								
Leakage Current	After 1 minute's application of rated voltage at 20°C, leakage current is not more than 0.03CV or 4 (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.)	0.22	0.19	0.16	0.14	0.12	0.10		
Stability at Low Temperature	Measurement frequency : 120Hz								
	Rated voltage (V)	6.3		10	16	25	35	50	
	Impedance ratio (MAX.)	Z-55°C / Z+20°C		5	5	4	3	3	2
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 5000 hours at 105°C.		Capacitance change		Within ±30% of the initial capacitance value				
			tan δ		300% 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 105°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 at right.		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				
Marking	Printed with white color letter on dark brown sleeve.								

Radial Lead Type

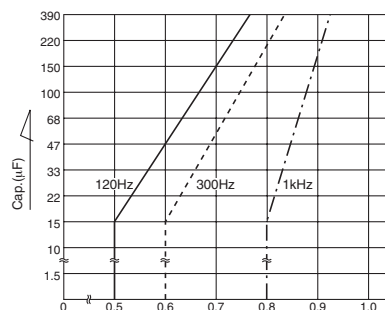


Type numbering system (Example : 25V 47µF)



• Please refer to the Guidelines for Aluminum Electrolytic Capacitors for end seal configuration information.

• Frequency coefficient of rated ripple current (10kHz to 200kHz=1)



• Dimension table in next page.

UPV

■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20°C after 1 minute)	Impedance (Ω) MAX. (20°C/100kHz)	Rated Ripple (mArms) (105°C/100kHz)	Part Number
6.3 (0J)	100	5×11	0.22	18.9	1.50	150	UPV0J101MFD
	120	5×11	0.22	22.68	1.10	175	UPV0J121MFD
	150	6.3×11	0.22	28.35	0.83	225	UPV0J151MGD
	180	6.3×11	0.22	34.02	0.66	250	UPV0J181MGD
	220	6.3×11	0.22	41.58	0.51	285	UPV0J221MGD
	270	8×11.5	0.22	51.03	0.41	370	UPV0J271MGD
	330	8×11.5	0.22	62.37	0.34	405	UPV0J331MGD
	390	8×11.5	0.22	73.71	0.29	445	UPV0J391MGD
10 (1A)	68	5×11	0.19	20.4	1.40	155	UPV1A680MFD
	82	5×11	0.19	24.6	1.10	175	UPV1A820MFD
	100	6.3×11	0.19	30	0.94	210	UPV1A101MGD
	120	6.3×11	0.19	36	0.75	235	UPV1A121MGD
	150	6.3×11	0.19	45	0.60	265	UPV1A151MGD
	180	6.3×11	0.19	54	0.49	290	UPV1A181MGD
	220	8×11.5	0.19	66	0.41	370	UPV1A221MGD
	270	8×11.5	0.19	81	0.34	405	UPV1A271MGD
	330	8×11.5	0.19	99	0.27	460	UPV1A331MGD
16 (1C)	47	5×11	0.16	22.56	1.40	155	UPV1C470MFD
	56	5×11	0.16	26.88	1.10	175	UPV1C560MFD
	68	6.3×11	0.16	32.64	0.85	220	UPV1C680MGD
	82	6.3×11	0.16	39.36	0.71	240	UPV1C820MGD
	100	6.3×11	0.16	48	0.60	265	UPV1C101MGD
	120	6.3×11	0.16	57.6	0.49	290	UPV1C121MGD
	150	8×11.5	0.16	72	0.39	375	UPV1C151MGD
	180	8×11.5	0.16	86.4	0.34	405	UPV1C181MGD
	220	8×11.5	0.16	105.6	0.27	460	UPV1C221MGD
25 (1E)	33	5×11	0.14	24.75	1.40	155	UPV1E330MFD
	39	5×11	0.14	29.25	1.10	175	UPV1E390MFD
	47	6.3×11	0.14	35.25	0.94	210	UPV1E470MGD
	56	6.3×11	0.14	42	0.75	235	UPV1E560MGD
	68	6.3×11	0.14	51	0.61	260	UPV1E680MGD
	82	6.3×11	0.14	61.5	0.51	285	UPV1E820MGD
	100	8×11.5	0.14	75	0.41	370	UPV1E101MGD
	120	8×11.5	0.14	90	0.34	405	UPV1E121MGD
	150	8×11.5	0.14	112.5	0.27	460	UPV1E151MGD

For cut leads, formed leads or taped parts, please add the appropriate code after the size code (12th digit).
If there is no size code in the part number, please add size code "1" and then add the appropriate code.

UPV

■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20°C after 1 minute)	Impedance (Ω) MAX. (20°C/100kHz)	Rated Ripple (mArms) (105°C/100kHz)	Part Number
35 (1V)	22	5×11	0.12	23.1	1.30	160	UPV1V220MFD
	27	5×11	0.12	28.35	1.00	180	UPV1V270MFD
	33	6.3×11	0.12	34.65	0.83	225	UPV1V330MGD
	39	6.3×11	0.12	40.95	0.70	245	UPV1V390MGD
	47	6.3×11	0.12	49.35	0.58	270	UPV1V470MGD
	56	6.3×11	0.12	58.8	0.48	295	UPV1V560MGD
	68	8×11.5	0.12	71.4	0.41	370	UPV1V680MGD
	82	8×11.5	0.12	86.1	0.32	415	UPV1V820MGD
	100	8×11.5	0.12	105	0.27	460	UPV1V101MGD
50 (1H)	1.5	5×11	0.10	4	11.00	45	UPV1H1R5MFD
	2.2	5×11	0.10	4	7.00	54	UPV1H2R2MFD
	3.3	5×11	0.10	4.95	4.60	66	UPV1H3R3MFD
	4.7	5×11	0.10	7.05	3.10	81	UPV1H4R7MFD
	6.8	5×11	0.10	10.2	2.50	91	UPV1H6R8MFD
	10	5×11	0.10	15	2.00	115	UPV1H100MFD
	12	5×11	0.10	18	1.70	125	UPV1H120MFD
	15	5×11	0.10	22.5	1.30	145	UPV1H150MFD
	18	5×11	0.10	27	1.10	155	UPV1H180MFD
	22	6.3×11	0.10	33	0.91	195	UPV1H220MGD
	27	6.3×11	0.10	40.5	0.74	215	UPV1H270MGD
	33	6.3×11	0.10	49.5	0.60	240	UPV1H330MGD
	39	6.3×11	0.10	58.5	0.50	260	UPV1H390MGD
	47	8×11.5	0.10	70.5	0.42	330	UPV1H470MGD
	56	8×11.5	0.10	84	0.35	360	UPV1H560MGD
68	8×11.5	0.10	102	0.28	410	UPV1H680MGD	

For cut leads, formed leads or taped parts, please add the appropriate code after the size code (12th digit).
If there is no size code in the part number, please add size code "1" and then add the appropriate code.

- For formed lead or taped product specifications and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.