

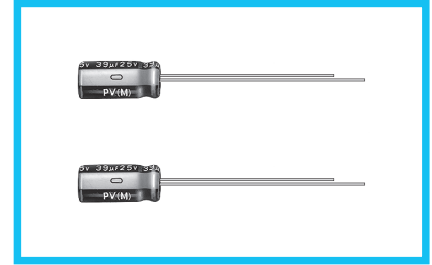
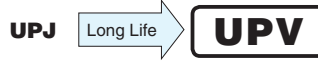
# ALUMINUM ELECTROLYTIC CAPACITORS

**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).

Valued marked with an ※ in the dimension table are scheduled to be discontinued and are not recommended for new designs.

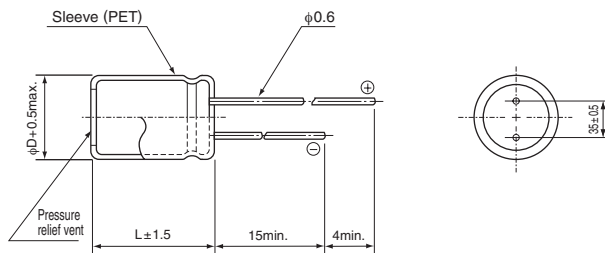


## Specifications

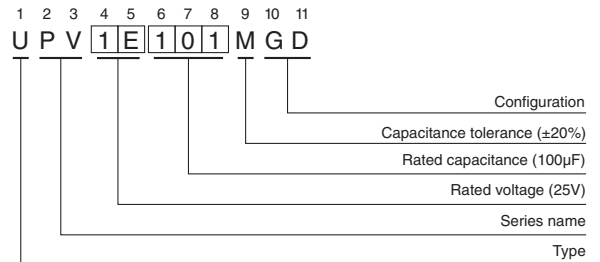
Item	Performance Characteristics						
Category Temperature Range	-55 to +105°C						
Rated Voltage Range	6.3 to 50V						
Rated Capacitance Range	47 to 390μF						
Capacitance Tolerance	±20% at 120Hz, 20°C						
Leakage Current ※	After 1 minute's application of rated voltage at 20°C, leakage current is not more than 0.03CV (μA).						
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
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.						

※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

## Radial Lead Type

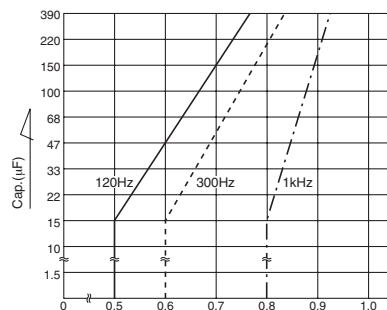


## Type numbering system (Example : 25V 100μF)



- 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 ( $\mu$ F)	Case Size $\phi$ D $\times$ L (mm)	$\tan \delta$	Leakage Current ( $\mu$ A) (at 20°C after 1 minute)	Impedance ( $\Omega$ ) max. (20°C/100kHz)	Rated Ripple (mA rms) (105°C/100kHz)	Part Number
6.3 (0J)	270	8 $\times$ 11.5	0.22	51.03	0.41	370	※UPV0J271MGD
	330	8 $\times$ 11.5	0.22	62.37	0.34	405	※UPV0J331MGD
	390	8 $\times$ 11.5	0.22	73.71	0.29	445	※UPV0J391MGD
10 (1A)	220	8 $\times$ 11.5	0.19	66	0.41	370	※UPV1A221MGD
	270	8 $\times$ 11.5	0.19	81	0.34	405	※UPV1A271MGD
	330	8 $\times$ 11.5	0.19	99	0.27	460	※UPV1A331MGD
16 (1C)	150	8 $\times$ 11.5	0.16	72	0.39	375	UPV1C151MGD
	180	8 $\times$ 11.5	0.16	86.4	0.34	405	UPV1C181MGD
	220	8 $\times$ 11.5	0.16	105.6	0.27	460	UPV1C221MGD
25 (1E)	100	8 $\times$ 11.5	0.14	75	0.41	370	UPV1E101MGD
	120	8 $\times$ 11.5	0.14	90	0.34	405	UPV1E121MGD
	150	8 $\times$ 11.5	0.14	112.5	0.27	460	UPV1E151MGD
35 (1V)	68	8 $\times$ 11.5	0.12	71.4	0.41	370	UPV1V680MGD
	82	8 $\times$ 11.5	0.12	86.1	0.32	415	UPV1V820MGD
	100	8 $\times$ 11.5	0.12	105	0.27	460	UPV1V101MGD
50 (1H)	47	8 $\times$ 11.5	0.10	70.5	0.42	330	UPV1H470MGD
	56	8 $\times$ 11.5	0.10	84	0.35	360	UPV1H560MGD
	68	8 $\times$ 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.