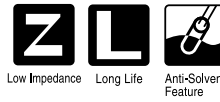


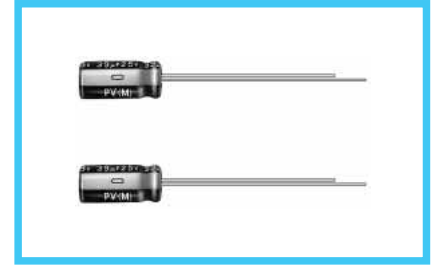
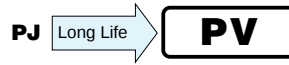


Miniature Sized, Low Impedance, High Reliability

series



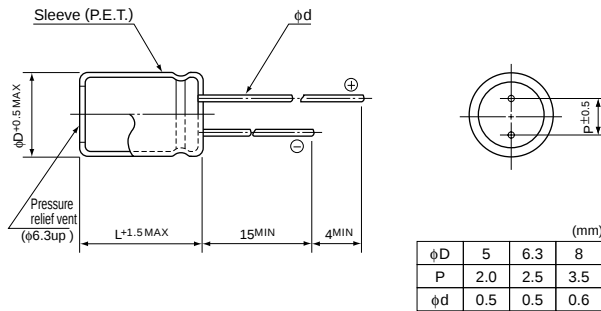
- Miniature sized low impedance series withstanding 5000 hours load life at +105°C.



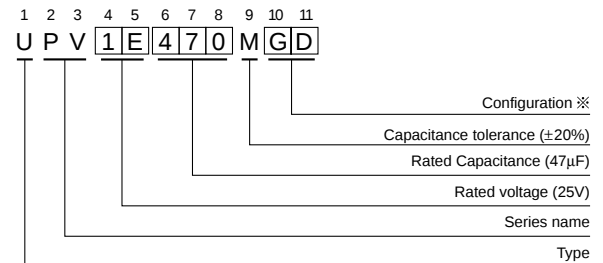
Specifications

Item	Performance Characteristics								
Category Temperature Range	-55 ~ +105°C								
Rated Voltage Range	6.3 ~ 50V								
Rated Capacitance Range	0.47 ~ 390μF								
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 4 (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.)	0.22	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 ZT / Z20 (MAX.)			Z-55°C / Z+20°C	5	5	4	3	3
Endurance	After 5000 hours' application of rated voltage at 105°C, capacitors meet the characteristics requirements listed at right.				Capacitance change		Within ±30% of initial value		
					tan δ		300% or less of initial specified value		
					Leakage current		Initial specified value or less		
Shelf Life	After leaving capacitors under no load at 105°C for 1000 hours, they meet the specified value for endurance characteritics listed at right.				Capacitance change		Within ±20% of initial value		
					tan δ		150% or less of initial specified value		
					Leakage current		Initial specified value or less		
Marking	Printed with white color letter on dark brown sleeve.								

Radial Lead Type



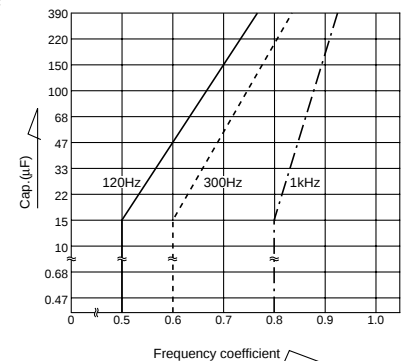
Type numbering system (Example : 25V 47μF)



※ Configuration		
φ D	Pb-free leadwire Pb-free PET sleeve	Sn-Pb finished leadwire PVC sleeve (containing Pb)
5	FD	FH
6.3 - 8	GD	GH

※ Please contact to us if other configurations are required.

- Frequency coefficient of rated ripple current (10kHz~200kHz=1)



Please refer to page 19, 20, 21 about the formed or taped product spec.
Please refer to page 3 for the minimum order quantity.

- Dimension table in next page.

■Dimensions

V(Code) Cap. (μF) Code		6.3 (0J)			10 (1A)			16 (1C)			25 (1E)		
		Case size φ D × L (mm)	Impedance (Ω) MAX. 20°C 100kHz	Rated ripple (mA rms) 105°C 100kHz	Case size φ D × L (mm)	Impedance (Ω) MAX. 20°C 100kHz	Rated ripple (mA rms) 105°C 100kHz	Case size φ D × L (mm)	Impedance (Ω) MAX. 20°C 100kHz	Rated ripple (mA rms) 105°C 100kHz	Case size φ D × L (mm)	Impedance (Ω) MAX. 20°C 100kHz	Rated ripple (mA rms) 105°C 100kHz
33	330										5 × 11	1.40	155
39	390										5 × 11	1.10	175
47	470							5 × 11	1.40	155	6.3 × 11	0.94	210
56	560							5 × 11	1.10	175	6.3 × 11	0.75	235
68	680				5 × 11	1.40	155	6.3 × 11	0.85	220	6.3 × 11	0.61	260
82	820				5 × 11	1.10	175	6.3 × 11	0.71	240	6.3 × 11	0.51	285
100	101	5 × 11	1.50	150	6.3 × 11	0.94	210	6.3 × 11	0.60	265	8 × 11.5	0.41	370
120	121	5 × 11	1.10	175	6.3 × 11	0.75	235	6.3 × 11	0.49	290	8 × 11.5	0.34	405
150	151	6.3 × 11	0.83	225	6.3 × 11	0.60	265	8 × 11.5	0.39	375	8 × 11.5	0.27	460
180	181	6.3 × 11	0.66	250	6.3 × 11	0.49	290	8 × 11.5	0.34	405			
220	221	6.3 × 11	0.51	285	8 × 11.5	0.41	370	8 × 11.5	0.27	460			
270	271	8 × 11.5	0.41	370	8 × 11.5	0.34	405						
330	331	8 × 11.5	0.34	405	8 × 11.5	0.27	460						
390	391	8 × 11.5	0.29	445									

V(Code) Cap.(μF) Code		Item	35 (1V)			50 (1H)		
			Case size φ D × L (mm)	Impedance (Ω) MAX. 20°C 100kHz	Rated ripple (mA rms) 105°C 100kHz	Case size φ D × L (mm)	Impedance (Ω) MAX. 20°C 100kHz	Rated ripple (mA rms) 105°C 100kHz
0.47	R47					5 × 11	32.0	22
0.68	R68					5 × 11	22.0	28
1	010					5 × 11	15.0	36
1.5	1R5					5 × 11	11.0	45
2.2	2R2					5 × 11	7.00	54
3.3	3R3					5 × 11	4.60	66
4.7	4R7					5 × 11	3.10	81
6.8	6R8					5 × 11	2.50	91
10	100					5 × 11	2.00	115
12	120					5 × 11	1.70	125
15	150					5 × 11	1.30	145
18	180					5 × 11	1.10	155
22	220		5 × 11	1.30	160	6.3 × 11	0.91	195
27	270		5 × 11	1.00	180	6.3 × 11	0.74	215
33	330		6.3 × 11	0.83	225	6.3 × 11	0.60	240
39	390		6.3 × 11	0.70	245	6.3 × 11	0.50	260
47	470		6.3 × 11	0.58	270	8 × 11.5	0.42	330
56	560		6.3 × 11	0.48	295	8 × 11.5	0.35	360
68	680		8 × 11.5	0.41	370	8 × 11.5	0.28	410
82	820		8 × 11.5	0.32	415			
100	101		8 × 11.5	0.27	460			