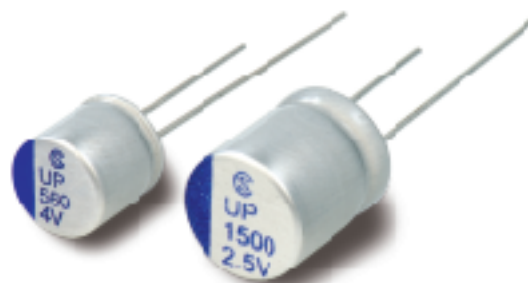


◆ **Features**

Super Low ESR at a high frequency range.  
 High Ripple Current capability.  
 2000 hours at 105°C.  
 Back up Power Supplies of CPU (VGA etc.).  
 Switching Power Supply and DC/DC Converter.  
 Green Design.(RoHS)

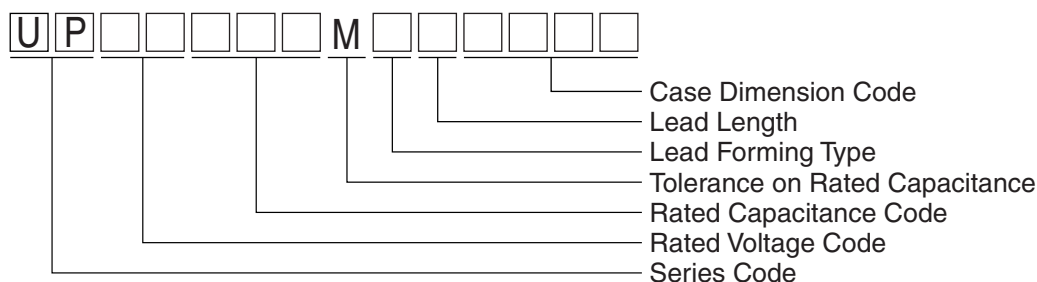


◆ **Specifications**

Items	Condition	Characteristics	
Category Temperature Range		-55 to +105°C	
Rated Voltage Range		2.5 to 16 Vdc	
Surge Voltage		Rated Voltage x 1.15	
Capacitance Tolerance	120Hz	± 20% (M)	
ESR	At 100KHz~300KHz, 20°C	See the Standard Ratings Table	
Tanδ of loss angle	At 120Hz, 20°C	See the Standard Ratings Table	
Leakage Current ※1	After 2 minutes	See the Standard Ratings Table	
Low Temperature Characteristics	Impedance ratio at 100 KHz	Z-25°C / Z+20°C ≤ 1.15 Z-55°C / Z+20°C ≤ 1.25	
Endurance	105°C 2,000 hrs. Rated voltage applied	Capacitance Change	≤ ± 20% of the initial measured value
		ESR	≤ 150% of the specified value
		Tanδ	≤ 150% of the specified value
		Leakage Current	The initial specified value
Damp Heat	60°C , 90 to 95% R.H, 1,000 hrs.	Capacitance change	≤ ± 20% of the initial measured value
		ESR	≤ 150% of the specified value
		Tanδ	≤ 150% of the ispecified value
		Leakage Current	The initial specified value
		Leakage Current should be tested after treatment	

※1 In case of some problems for measured values,  
 measure after applying rated voltage for 120 minutes at 105°C

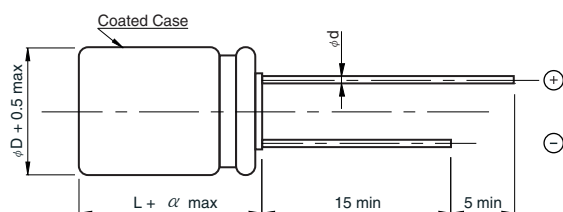
## ◆ Part Number System



## ◆ Standard Ratings UP Series

Rated Voltage (Vdc)	Rated Capacitance ( $\mu$ F)	Case Size $\phi$ D $\times$ L (mm)	ESR 100 KHz~to 300KHz ( $m\Omega$ max)	Rated Ripple Current (mArms/105°C 100KHz)	Tan $\delta$	Leakage Current ( $\mu$ A)	Part Number
2.5 (0E)	560	8 $\times$ 8	7	4700	0.12	350	UP0E561MNN0808
	680	8 $\times$ 8	7	5580	0.12	425	UP0E681MNN0808
	820	8 $\times$ 11	7	5580	0.12	410	UP0E821MNN0811
	1000	8 $\times$ 11	7	5860	0.12	500	UP0E102MNN0811
	1500	10 $\times$ 12	7	6100	0.15	750	UP0E152MNN1012
4 (0G)	470	8 $\times$ 8	7	5600	0.12	470	UP0G471MNN0808
	560	8 $\times$ 8	7	5600	0.12	560	UP0G561MNN0808
	820	10 $\times$ 12	7	6100	0.12	656	UP0G821MNN1012
	1200	10 $\times$ 12	7	6100	0.15	960	UP0G122MNN1012
6.3 (0J)	220	8 $\times$ 8	7	3700	0.10	347	UP0J221MNN0808
	330	8 $\times$ 8	7	3700	0.10	520	UP0J331MNN0808
	680	10 $\times$ 12	7	5860	0.12	857	UP0J681MNN1012
	820	10 $\times$ 12	7	6100	0.15	1033	UP0J821MNN1012
	1000	10 $\times$ 12	7	6100	0.15	1260	UP0J102MNN1012
10 (1A)	270	8 $\times$ 11	7	5600	0.12	540	UP1A271MNN0811
	470	10 $\times$ 12	7	6100	0.12	940	UP1A471MNN1012
	560	10 $\times$ 12	7	6100	0.12	1120	UP1A561MNN1012
16 (1C)	150	8 $\times$ 11	7	5600	0.12	480	UP1C151MNN0811
	180	8 $\times$ 11	7	5600	0.12	576	UP1C181MNN0811
	330	10 $\times$ 12	7	6100	0.12	1056	UP1C331MNN1012
	470	10 $\times$ 12	7	6100	0.12	1504	UP1C471MNN1012

## ◆ Dimension



## ◆ Lead

$\phi$ D	8	8	10
$\phi$ d	0.6		
L	8.0	11.0	12.0
$\alpha$	1.0	1.5	1.5
F	3.5	3.5	5.0

## ◆ Marking

EX) 560  $\mu$ F 4V

