



UPR Series

- Super low ESR at a high frequency range
- High ripple current capability
- 2,000 hours at 105°C

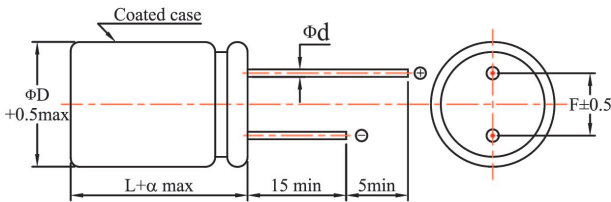


SPECIFICATIONS

Item	Performance Characteristics	
Category Temperature Range	-55 ~ +105°C	
Working Voltage Range	2.5 ~ 16Vdc	
Surge Voltage	Rated Voltage x1.15	
Capacitance Tolerance	M: ±20% (at 25°C and 120Hz)	
ESR	See the standard ratings table (at 25°C, 100~300KHz)	
Dissipation Factor (Tanδ)	See the standard ratings table (at 25°C, 120Hz)	
Leakage Current ※1	See the standard ratings table (Impress the rated voltage for 2 minutes)	
Low Temperature Characteristics Impedance Ratio	Z(-25°C)/Z(+25°C) ≤ 1.15 at 100KHz Z(-55°C)/Z(+25°C) ≤ 1.25 at 100KHz	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 25°C after subjected to DC voltage with the rated ripple current is applied for 2,000 hours at 105°C	
	Capacitance change	≤ ±20% of the initial value
	ESR	≤ 150% of the specified value
	Dissipation factor(tanδ)	≤ 150% of the specified value
	Leakage current	≤ specified value
Damp Heat (Steady State)	The following requirements shall be satisfied when the capacitor are restored to 25°C after exposing them for 1,000 hours at 60°C 90 to 95% RH	
	Capacitance change	≤ ±20% of the initial value
	ESR	≤ 150% of the specified value
	Dissipation factor(tanδ)	≤ 150% of the specified value
	Leakage current	≤ specified value

※1 In case of some problems for measured values, measure after applying rated voltage for 120 minutes at 105°C
 ※2 ESR should be measured at both of the terminal ends closest to the capacitor body

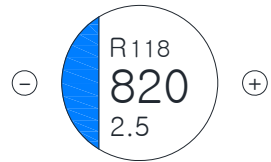
DIMENSIONS (mm)



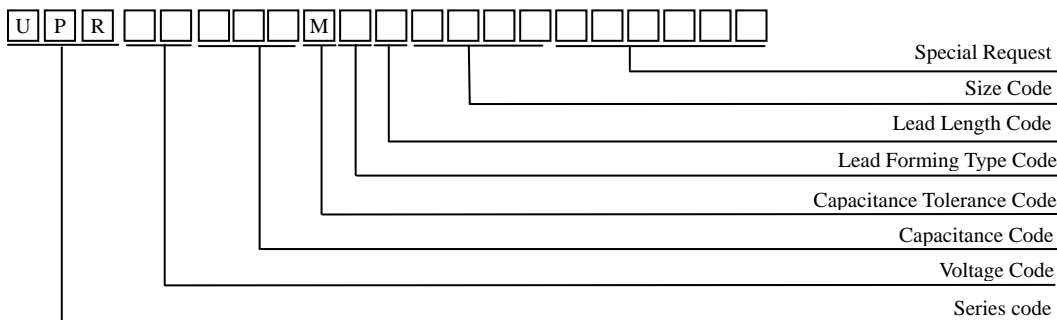
Lead

ΦD	5	10
Φd	0.45	0.6
L	8	8
α	1	1
F	2	2.5

Marking



PART NUMBER SYSTEM





UPR Series

◆ Standard Ratings

Rated Voltage (Vdc)	Rated Capacitance (μF)	Case Size ΦD×L (mm)	ESR 100~300KHz (mΩmax)	Rated Ripple Current 105°C,100KHz (mArms max)	Tanδ max	Leakage Current (μA max)	Part Number
2.5(0E)	220	5×8	8	4340	0.10	500	UPR0E221MNN0508
	330	5×8	8	4340	0.10	500	UPR0E331MNN0508
	560	5×8	8	4340	0.10	500	UPR0E561MNN0508
	560	6.3×8	8	4700	0.10	500	UPR0E561MNN6308
	680	6.3×8	8	4900	0.10	500	UPR0E681MNN6308
	820	6.3×8	8	5000	0.10	513	UPR0E821MNN6308
	820	6.3×8	5	5900	0.10	513	UPR0E821MNN6308E
4(0G)	560	6.3×8	8	4700	0.10	560	UPR0G561MNN6308
6.3(0J)	220	5×8	11	3200	0.10	300	UPR0J221MNN0508
	220	6.3×8	9	3900	0.10	500	UPR0J221MNN6308
	270	5×8	8	4050	0.10	500	UPR0J271MNN0508
	330	5×8	8	4050	0.10	500	UPR0J331MNN0508
	330	6.3×8	8	4700	0.10	500	UPR0J331MNN6308
	390	6.3×8	8	4700	0.10	530	UPR0J391MNN6308
	470	6.3×8	8	4700	0.10	592	UPR0J471MNN6308
	560	5×8	7	4180	0.10	500	UPR0J561MNN0508
	560	6.3×8	8	4700	0.10	706	UPR0J561MNN6308
	680	6.3×8	8	4700	0.10	856	UPR0J681MNN6308
	820	6.3×8	8	4700	0.10	1033	UPR0J821MNN6308
10(1A)	100	5×8	35	2200	0.10	300	UPR1A101MNN0508
	150	6.3×8	24	2820	0.10	480	UPR1A151MNN6308
	220	6.3×8	8	4700	0.10	550	UPR1A221MNN6308
	270	6.3×8	8	4700	0.10	540	UPR1A271MNN6308
	330	6.3×8	8	4700	0.10	660	UPR1A331MNN6308
16(1C)	100	6.3×8	10	4680	0.10	320	UPR1C101MNN6308
	270	6.3×8	10	5080	0.10	864	UPR1C271MNN6308