UPR Series

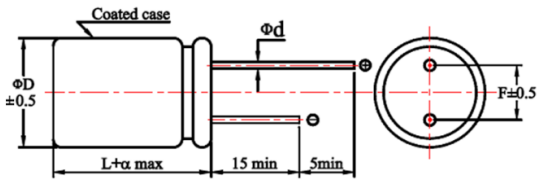
- **Super low ESR at a high frequency ranged**
- **High ripple current capability**
- **2,000 hours at 105℃**

◆ SPECIFICATIONS

Item	Performance Characteristics
Category Temperature Range	-55 ~ +105℃
Working Voltage Range	2.5 ~ 16Vdc
Surge Voltage	Rated Voltage ×1.15
Capacitance Tolerance	M: ±20% (at 25℃ and 120Hz)
ESR	See the standard ratings table (at 25℃, 100~300KHz)
Dissipation Factor (Tanδ)	See the standard ratings table (at 25℃, 120Hz)
Leakage Current ※1	See the standard ratings table (Impress the rated voltage for 2 minutes)
Low Temperature Characteristics Impedance Ratio	Z(-25℃)/Z(+25℃) ≤1.15 at 100KHz Z(-55℃)/Z(+25℃) ≤1.25 at 100KHz
Endurance	The following specifications shall be satisfied when the capacitors are restored to 25℃ after subjected to DC voltage for 2,000 hours at 105℃. 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℃ after exposing them for 1,000 hours at 60℃ 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
Others	Conforms to JIS-C-5101-26 (2012)

※1 In case of some problems for measured values, measure after applying rated voltage for 120 minutes at105℃.
※2 ESR should be measured at both of the terminal ends closest to the capacitor body.

◆ DIMENSIONS (mm)



◆ LEAD

ΦD	5	6.3	6.3
Φd	0.45	0.6	0.6
L	8	8	12
α	1	1	1.5
F	2	2.5	2.5

◆ MARKING

◆ PART NUMBER SYSTEM (Example : 2.5V 820µF)

U	P	R	0	E	8	2	1	M	N	N	6	3	0	8						

Special Request
Size code(6308 : 6.3×8)
Terminal length code
Lead forming Type code
Capacitance tolerance code(M:±20%)
Capacitance code(820µF)
Voltage code(2.5V)
Series code (UPR)

UPR Series

◆ **STANDARD RATINGS**

WV (Vdc)	Cap (μF)	Case Size (mm) ΦD×L	ESR 100~300KHz (mΩmax)	Rated Ripple current (mArms/ 105℃, 100KHz)	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
	1000	6.3×8	7	5600	0.10	625	UPR0E102MNN6308
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
	220	6.3×8	10	4700	0.12	704	UPR1C221MNN6308
	270	6.3×8	10	5080	0.10	864	UPR1C271MNN6308
	330	6.3×8	10	5080	0.10	1056	UPR1C331MNN6308
	330	6.3×12	10	5000	0.10	1056	UPR1C331MNN6312
	470	6.3×12	11	5300	0.12	1504	UPR1C471MNN6312