

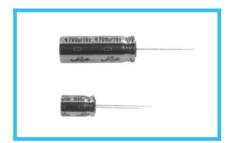
For General Audio Equipment, Wide Temperature Range. series





- 105°C standard for audio equipment
 Compliant to the RoHS directive (2002/95/EC).

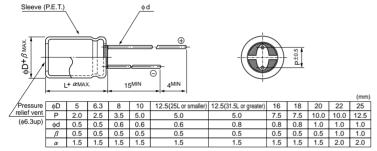




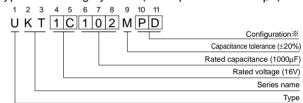
■ Specifications

Item	Performance Characteristics										
Category Temperature Range	−55 to +105°C										
Rated Voltage Range	6.3 to 50V										
Rated Capacitance Range	0.1 to 33000μF										
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. After 2 minutes' application of rated voltage, leakage current is not more than 0.01CV or 3 (μA) , whichever is greater.										
Tangent of loss angle (tan δ)	Rated voltage (V) 6.3 10 tan δ (MAX.) 0.30 0.26	16 0.22		25 0.18	35 0.16	50	-	Measurement frequency : 120Hz, Temperature : 20°C			
	For capacitance of more than 1000µF, add 0.02 for every increase of 1000µF										
	Rated voltage (V)	6.3	10	16	25	35	50	Measurement frequency : 120Hz			
Stability at Low Temperature	Impedance ratio Z-25°C / Z+20°C	5	4	3	2	2	2				
	ZT / Z20 (MAX.) Z-40°C / Z+20°C	10	8	6	4	3	3				
	The specifications listed at right shall be					±20% of the initial capacitance value					
Endurance	the capacitors are restored to 20°C after				0% or less than the initial specified value						
	voltage is applied for 1000 hours at 105°C. Leakage current Les						s than or equal to the initial specified value				
Shelf Life	After storing the capacitors under no load at 105°C tor 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 above. Printed with black color letter on purl blue sleeve.										
Marking											

■Radial Lead Type



Type numbering system (Example: 16V 1000µF)



X Configuration

1	φD	Pb-free leadwire Pb-free PET sleeve					
	5	DD					
	6.3	ED					
	8 - 10	PD					
	12.5 to 18	HD					
	20 to 25	RD					

Please refer to page 20 about the end seal configulation

Dimension	IS	• Flease le	ilei to pa	age 20 about in	e ena si	eai coringulatioi	1.		20 to 25	RD			
V		6.3		10		16		25		35		50	
Cap.(µF) code		0J		1A		1C		1E		1V		1H	
0.1	0R1											5 × 11	1.3
0.22	R22								1			5 × 11	2.9
0.33	R33								-			5 × 11	4.3
0.47	R47								-			5 × 11	7.0
1	010											5 × 11	13
2.2	2R2											5 × 11	20
3.3	3R3											5 × 11	25
4.7	4R7							5 × 11	25	5 × 11	28	5 × 11	30
10	100					5 × 11	35	5 × 11	36	5 × 11	41	5 × 11	46
22	220	5 × 11	45	5 × 11	45	5 × 11	54	5 × 11	58	5 × 11	61	5 × 11	68
33	330	5 × 11	55	5 × 11	58	5 × 11	65	5 × 11	68	5 × 11	75	5 × 11	90
47	470	5 × 11	65	5 × 11	68	5 × 11	79	5 × 11	83	5 × 11	93	6.3 × 11	115
100	101	5 × 11	95	5 × 11	105	5 × 11	115	6.3 × 11	140	6.3 × 11	150	8 × 11.5	190
220	221	6.3 × 11	160	6.3 × 11	175	6.3 × 11	190	8 × 11.5	240	8 × 11.5	260	10 × 12.5	300
330	331	6.3 × 11	195	8 × 11.5	240	8 × 11.5	265	8 × 11.5	290	10 × 12.5	350	10 × 16	410
470	471	8 × 11.5	270	8 × 11.5	280	8 × 11.5	315	10 × 12.5	380	10 × 16	460	12.5 × 20	530
1000	102	10 × 12.5	420	10 × 16	500	10 × 16	560	10 × 20	680	12.5 × 25	860	12.5 × 31.5	1040
2200	222	10 × 20	710	12.5 × 20	810	12.5×20	920	12.5 × 31.5	1200	12.5 × 40	1260	16 × 35.5	1470
3300	332	12.5 × 20	910	12.5 × 25	1050	12.5 × 31.5	1270	12.5×35.5	1400	16×35.5	1610	18×35.5	1770
4700	472	12.5 × 25	1120	12.5 × 35.5	1300	12.5 × 35.5	1480	16 × 31.5	1710	18 × 35.5	1910	20 × 40	2100
6800	682	12.5 × 35.5	1360	12.5 × 40	1570	16× 31.5	1780	18 × 35.5	2040	20 × 40	2150	22 × 50	2500
10000	103	12.5 × 40	1650	16 × 35.5	1890	18 × 35.5	2060	20 × 40	2150	22 × 50	2650		ŀ
15000	153	16 × 35.5	2010	18 × 40	2400	20 × 40	2430	22 × 50	2750			Case size	Dotod
22000	223	18 × 40	2350	22 × 40	2650	22 × 50	3000					φD×L (mm)	Rated
33000	333	22 × 50	2800	25×50	2880							ψ Δ Λ L (IIIIII)	

• Frequency coefficient of rated ripple current

	Cap.(µF)	50Hz	120Hz	300Hz	1kHz	10kHz or more		
	0.1 to 47	0.75	1.00	1.35	1.57	2.00		
I	100 to 470	0.80	1.00	1.23	1.34	1.50		
ı	1000 to 33000	0.85	1.00	1.10	1.13	1.15		

Rated ripple current (mArms) at 105°C 120Hz

Please refer to page 20, 21, 22 about the formed or taped product spec. Please refer to page 4 for the minimum order quantity.