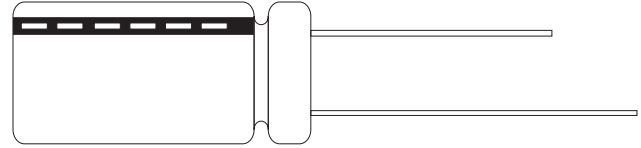


FEATURES

- 105°C, 2000 ~ 5000 hours assured.
- Low ESR, suitable for switching power supplies.
- Small size with large permissible ripple current.

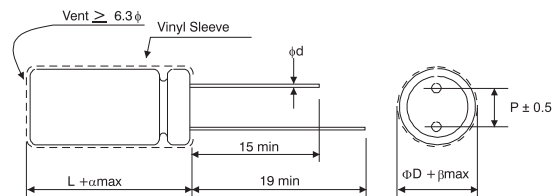


SPECIFICATIONS

Item	Performance								
Operating Temperature Range	-55°C ~ +105°C								
Capacitance Tolerance	± 20% (120Hz, 20°C)								
Leakage Current (at 20°C)	I = 0.01CV or 3 (μA) whichever is greater (after 2 minutes) Where, C = rated capacitance in μF, V=rated DC working voltage in V.								
Dissipation Factor Tan δ at 120 Hz, 20°C	Rated Voltage	6.3	10	16	25	35	50	63	
	Tan δ (max)	0.22	0.19	0.16	0.14	0.12	0.10	0.08	
When the capacitance exceed 1000 μF 0.02 shall be added every 1000 μF.									
Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below								
Impedance Ratio	Rated Voltage	6.3	10	16	25	35	50	63	
	Z(-55°C) / Z(+20°C)	4	4	3	3	3	3	3	3
Load Life Test	Test Time	2000hrs for D 5 ~8mm 4000hrs for D = 10mm 5000hrs for D ≥13mm							
	Capacitance Change	Within ± 20%							
	Dissipation Factor	Less than 200% of specified value.							
	Leakage Current	Within specified value							
The above specification shall be satisfied when the capacitors are restored to 20°C after rated voltage applied for 2000 hrs at 105°C. High than 2000 hrs load life are available upon request.									
Shelf Life Test	Test Time	1000 Hrs							
	Capacitance Change	Within ± 20%							
	Dissipation Factor	Less than 200% of specified value							
	Leakage Current	Within Specified value							
The above specification shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hrs at 105°C without voltage applied.									
Ripple Current & Frequency Multipliers	Freq. (Hz) \ Cap. (mF)	60(50)	120	500	1K	10K	100K		
	Under 33	0.40	0.55	0.65	0.80	0.90	1.00		
	39 to 330	0.60	0.70	0.80	0.90	0.95	1.00		
	390 to 1000	0.65	0.80	0.85	0.98	1.00	1.00		
Ripple Current & Temperature Multipliers	Temperature (°C)	Under 50	70	85	105				
	Multipliers	2.40	2.05	1.70	1.00				
Standards	Satisfies Characteristic W of JIS C 5141								

LEAD SPACING AND DIAMETER

φ d	5	6.3	8	10	13	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
φ d	0.5		0.6		0.8		
α	1.0			1.5			
β	0.5						



PART NUMBER EXAMPLE RXK 221 M 1H BK 100 250

■ DIMENSIONS AND PERMISSABLE RIPPLE CURRENT

Dimension: $\phi D \times L$ (mm)

Ripple Current: mA/rms at 100Hz 105°C

VDC Item		6.3V(0J)				
F	Code	DXL	Impedance (, Max/100K Hz)		Ripple Current (mA/rms, 105°C)	
			20°C	-10°C	120Hz	100KHz
120	121	5 x 11	0.720	1.800	116	165
220	221	6.3 x 11	0.380	0.950	179	255
330	331	6.3 x 15	0.270	0.680	231	330
390	391	8 x 11.5	0.200	0.500	332	415
470	471	10 x 12.5	0.120	0.300	500	625
560	561	8 x 15	0.160	0.400	396	495
680	681	10 x 16	0.084	0.210	660	825
820	821	8 x 20	0.110	0.280	512	640
1200	122	10 x 20	0.062	0.160	936	1040
1500	152	10 x 25	0.052	0.130	1134	1260
2200	222	10 x 30	0.044	0.110	1296	1440
		13 x 20	0.046	0.120	1206	1340
2700	272	13 x 25	0.034	0.085	1521	1690
3900	392	13 x 30	0.03	0.075	1755	1950
4700	472	13 x 35	0.027	0.068	1980	2200
5600	562	13 x 40	0.024	0.06	2151	2390
		16 x 25	0.028	0.07	1863	2070
6800	682	16 x 31.5	0.025	0.063	2115	2350

VDC Item		10V(1A)				
F	Code	DXL	Impedance (, Max/100K Hz)		Ripple Current (mA/rms, 105°C)	
			20°C	-10°C	120Hz	100KHz
82	820	5 x 11	0.720	1.800	116	165
180	181	6.3 x 11	0.380	0.950	179	255
270	271	6.3 x 15	0.270	0.680	231	330
330	331	8 x 11.5	0.200	0.500	291	415
390	391	10 x 12.5	0.120	0.300	500	625
470	471	8 x 15	0.160	0.400	396	495
680	681	8 x 20	0.110	0.280	512	640
		10 x 16	0.084	0.210	660	825
1000	102	10 x 20	0.062	0.160	936	1040
1200	122	10 x 25	0.052	0.130	1134	1260
1500	152	10 x 30	0.044	0.110	1296	1440
1800	182	13 x 20	0.046	0.120	1206	1340
2200	222	13 x 25	0.034	0.085	1521	1690
2700	272	13 x 30	0.03	0.075	1755	1950
3300	332	13 x 35	0.027	0.068	1980	2200
3900	392	13 x 40	0.024	0.060	2151	2390
		16 x 25	0.028	0.070	1863	2070
5600	562	16 x 31.5	0.025	0.063	2115	2350
6800	682	16 x 35.5	0.022	0.055	2295	2550

VDC Item		16V(1C)				
F	Code	DXL	Impedance (, Max/100K Hz)		Ripple Current (mA/rms, 105°C)	
			20°C	-10°C	120Hz	100KHz
56	560	5 x 11	0.720	1.800	116	165
120	121	6.3 x 11	0.380	0.950	179	255
180	181	6.3 x 15	0.270	0.680	231	330
270	271	8 x 11.5	0.200	0.500	291	415
		10 x 12.5	0.120	0.300	438	625
330	331	8 x 15	0.160	0.400	347	495
470	471	8 x 20	0.110	0.280	512	640
		10 x 16	0.084	0.210	660	825
680	681	10 x 20	0.062	0.160	832	1040
820	821	10 x 25	0.052	0.130	1008	1260
1200	122	10 x 30	0.044	0.110	1296	1440
		13 x 20	0.046	0.120	1206	1340
1500	152	13 x 25	0.034	0.080	1521	1690
2200	222	13 x 30	0.030	0.075	1755	1950
2700	272	13 x 35	0.027	0.068	1980	2200
		16 x 25	0.028	0.07	1863	2070
3300	332	13 x 40	0.024	0.06	2151	2390
3900	392	16 x 31.5	0.025	0.063	2115	2350
4700	472	16 x 35.5	0.022	0.055	2295	2550
5600	562	16 x 40	0.018	0.045	2610	2900
6800	682	18 x 35.5	0.021	0.053	2394	2660

VDC Item		25V(1E)				
F	Code	DXL	Impedance (, Max/100K Hz)		Ripple Current (mA/rms, 105°C)	
			20°C	-10°C	120Hz	100KHz
39	390	5 x 11	0.720	1.800	116	165
82	820	6.3 x 11	0.380	0.950	179	255
120	121	6.3 x 15	0.270	0.680	231	330
150	151	8 x 11.5	0.500	0.020	291	415
180	181	10 x 12.5	0.120	0.300	438	625
220	221	8 x 15	0.160	0.400	347	495
330	331	8 x 20	0.110	0.280	448	640
		10 x 16	0.084	0.210	578	825
470	471	10 x 20	0.062	0.160	832	1040
560	561	10 x 25	0.052	0.130	1008	1260
820	821	10 x 30	0.044	0.110	1152	1440
		13 x 20	0.046	0.120	1072	1340
1000	102	13 x 25	0.034	0.085	1352	1690
1500	152	13 x 30	0.030	0.075	1755	1950
1800	182	16 x 25	0.028	0.070	1863	2070
2200	222	13 x 40	0.024	0.060	2151	2390
2700	272	16 x 31.5	0.025	0.063	2115	2350
3300	332	16 x 35.5	0.022	0.055	2295	2550
3900	392	16 x 40	0.018	0.045	2610	2900
		18 x 35.5	0.021	0.053	2394	2660
4700	472	18 x 40	0.017	0.043	2709	3010

■ DIMENSIONS AND PERMISSABLE RIPPLE CURRENT

Dimension: $\phi D \times L$ (mm)

Ripple Current: mA/rms at 100Hz 105°C

VDC Item		35V(1V)					
F	Code	DXL	Impedance (, Max/100K Hz)		Ripple Current (mA/rms, 105°C)		
			20°C	-10°C	120Hz	100KHz	
			27	270	5 x 11	0.720	1.800
56	560	6.3 x 11	0.380	0.950	179	255	
82	820	6.3 x 15	0.270	0.680	231	330	
120	121	8 x 11.5	0.200	0.500	291	415	
		10 x 12.5	0.120	0.300	438	625	
180	181	8 x 15	0.160	0.400	347	495	
220	221	8 x 20	0.110	0.280	448	640	
		10 x 16	0.084	0.210	578	825	
330	331	10 x 20	0.062	0.160	728	1040	
390	391	10 x 25	0.052	0.130	1008	1260	
560	561	10 x 30	0.040	0.110	1152	1440	
		13 x 20	0.046	0.120	1072	1340	
680	681	13 x 25	0.034	0.085	1352	1690	
1000	102	13 x 30	0.030	0.075	1560	1950	
1200	122	13 x 35	0.027	0.068	1980	2200	
		16 x 25	0.028	0.070	1863	2070	
1500	152	13 x 40	0.024	0.060	2151	2390	
1800	182	16 x 31.5	0.025	0.063	2115	2350	
2200	222	16 x 35.5	0.022	0.055	2295	2550	
2700	272	16 x 40	0.018	0.045	2610	2900	
		18 x 35.5	0.021	0.053	2394	2660	
3300	332	18 x 40	0.010	0.043	2709	3010	

VDC Item		50V(1H)					
F	Code	DXL	Impedance (, Max/100K Hz)		Ripple Current (mA/rms, 105°C)		
			20°C	-10°C	120Hz	100KHz	
			18	180	5 x 11	1.100	3.300
39	390	6.3 x 11	0.560	1.600	154	220	
56	560	6.3 x 15	0.410	1.200	217	310	
68	680	8 x 11.5	0.290	0.840	238	340	
82	820	8 x 15	0.250	0.750	329	470	
		10 x 12.5	0.160	0.400	336	480	
120	121	8 x 20	0.180	0.520	427	610	
		10 x 16	0.120	0.300	529	755	
180	181	10 x 20	0.088	0.220	662	945	
220	221	10 x 25	0.068	0.170	805	1150	
330	331	10 x 30	0.059	0.150	882	1260	
		13 x 20	0.059	0.150	833	1190	
470	471	13 x 25	0.045	0.110	1192	1490	
560	561	13 x 30	0.039	0.098	1376	1720	
680	681	13 x 35	0.033	0.083	1512	1890	
820	821	13 x 40	0.029	0.073	1624	2030	
		16 x 25	0.033	0.083	1504	1880	
1000	102	16 x 31.5	0.029	0.073	1720	2150	
1200	122	16 x 35.5	0.025	0.063	2088	2320	
1500	152	16 x 40	0.021	0.063	2286	2540	
1800	182	18 x 35.5	0.023	0.058	2160	2400	
2200	222	18 x 40	0.020	0.050	2349	2610	

VDC Item		63V(1J)					
F	Code	DXL	Impedance (, Max/100K Hz)		Ripple Current (mA/rms, 105°C)		
			20°C	-10°C	120Hz	100KHz	
			12	120	5 x 11	1.900	4.800
27	270	6.3 x 11	1.100	2.800	88	160	
39	390	6.3 x 15	0.620	1.600	161	230	
47	470	8 x 11.5	0.490	1.300	193	275	
56	560	10 x 12.5	0.270	0.680	294	420	
68	680	8 x 15	0.340	0.850	252	360	
		10 x 16	0.210	0.530	366	523	
82	820	8 x 20	0.210	0.530	350	500	
120	121	10 x 20	0.160	0.400	455	650	
150	151	10 x 25	0.130	0.330	546	780	
180	181	10 x 30	0.100	0.250	672	960	
220	221	13 x 20	0.110	0.280	609	870	
270	271	13 x 25	0.074	0.190	805	1150	
390	391	13 x 30	0.068	0.170	1024	1280	
470	471	13 x 35	0.063	0.160	1112	1390	
		16 x 25	0.055	0.140	1184	1480	
560	561	13 x 40	0.051	0.130	1224	1530	
680	681	16 x 31.5	0.046	0.120	1376	1720	
820	821	16 x 35.5	0.040	0.100	1528	1910	
1000	102	18 x 35.5	0.040	0.100	1576	1970	