

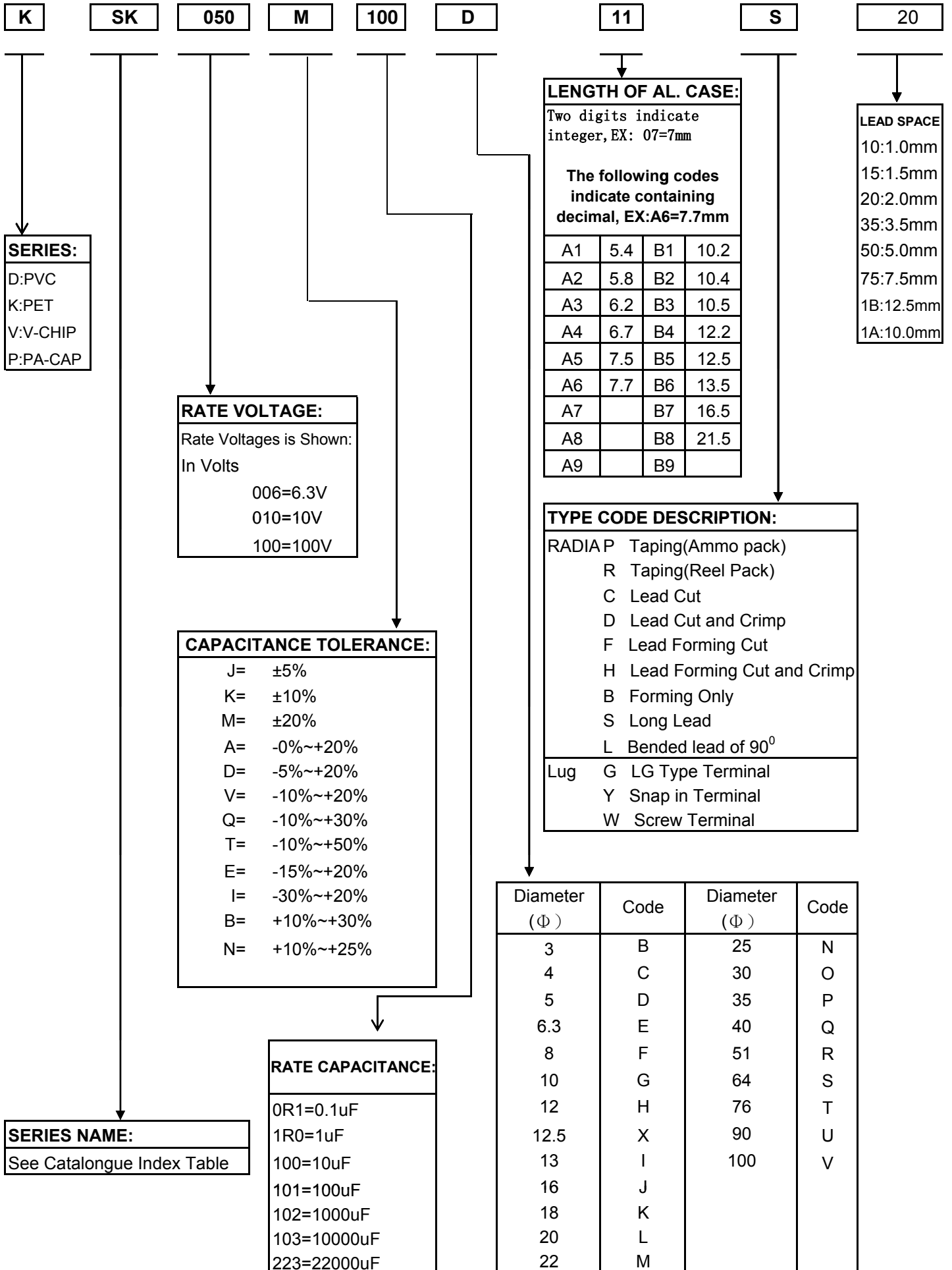
Features

105°C high-temperature resistance
 For general purposes

Specifications

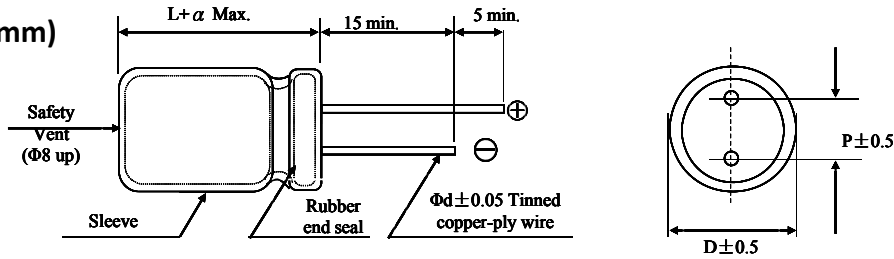
Items	Characteristics											
Capacitance Tolerance	±20% (120Hz, 20°C)											
Operating temperature Range	-40~+105°C				-40~+105°C				-25~+105°C			
Rated Voltage Range	6.3~100V				160~250V				350~450V			
Leakage Current	I ≤ 0.01CV or 3 (uA), Which is greater. (After 2 minutes application of working voltage)						I ≤ 0.03CV +20 (uA), (After 3 minutes application of working voltage)					
Dissipation Factor (tan δ)	Measurement Frequency: 120Hz. Temperature: 20°C											
	Rated Voltage (V)	6.3	10	16	25	35	50	63	80	100	160~250	350~450
	tan δ (MAX)	0.24	0.20	0.16	0.15	0.12	0.10	0.09	0.08	0.08	0.20	0.25
	When nominal capacitance exceeds 1000uF, add 0.02 to the value above for each 1000uF increase. (20°C、120Hz)											
Low Temperature Stability Impedance Ratio (MAX)	Measurement Frequency: 120Hz.											
	Rated Voltage (V)	6.3	10	16	25	35	50~100	160~250	350~400	450		
	Z (-25°C) / Z (20°C)	5	4	3	2	2	2	3	6	15		
	Z (-40°C) / Z (20°C)	10	8	6	4	3	3	4	-	-		
Load Life	2000 hours, with application of working voltage at 105°C.											
	Capacitance Change						Within ±25% of Initial Value					
	tan δ						200% or less of Initial Specified Value					
	Leakage Current						Initial Specified Value or less					
Shelf Life	2000hours, no voltage applied, at 105°C. After Test: U _R to be applied for 30 minutes, 24 to 48 hours before measurement.											
	Capacitance Change						Within ±20% of Initial Value					
	tan δ						200% or less of Initial Specified Value					
	Leakage Current						Initial Specified Value or less					
Standards	JIS C 5141 and JIS C 5102											
Permissible Ripple Current												
Temperature Coefficient												
TEMP (°C)	60			70			85			105		
Coefficient	1.85			1.65			1.40			1.00		
Frequency Coefficient												
WV (V)	Capacitance (uF)	Frequency (Hz)										
		50		120		1K		≥10K				
≤ 100	<100	0.75		1.00		1.57		2.00				
	100~470	0.80		1.00		1.34		1.50				
	>470	0.85		1.00		1.10		1.15				
≥ 160	0.47~470	0.85		1.00		1.40		1.50				

Part Number Codes



Aluminum Electrolytic Capacitors

Dimensions(mm)



ΦD	5	6.3	8	10	13	16	18	22	25
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10	12.5
Φd	0.5	0.5	0.5	0.6	0.6	0.8	0.8	0.8	1.0

α	(L < 16) 1.0 (L \geq 16) 2.0
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STANDARD RATINGS

D x L (mm); R.C.: (mA rms) at 105°C, 120Hz.

Cap (uF)	WV(V) (Code)	6.3 (0J)		10 (1A)		16 (1C)		25 (1E)		35 (1V)		50 (1H)		63 (1J)	
		D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.
0.1~0.47												5x11	9.9	5x11	5
1.0												5x11	14	5x11	15
2.2												5x11	22	5x11	23
3.3												5x11	27	5x11	28
4.7								5x11	27	5x11	28	5x11	33	5x11	34
6.8								5x11	32	5x11	34	5x11	42	5x11	46
10				5x11	36	5x11	38	5x11	39	5x11	43	5x11	49	5x11	53
22		5x11	49	5x11	49	5x11	59	5x11	57	5x11	68	5x11	75	5x11(8*12)	99
33		5x11	60	5x11	64	5x11	72	5x11	75	5x11	83	5x11	97	6.3x11	110
47		5x11	71	5x11	72	5x11	85	5x11	88	5x11	95	6.3x11	132	6.3x11	133
56		5x11	82	5x11	86	5x11	95	5x11	99	6.3x12	115	6.3x12	137	8x12	156
68		5x11	93	5x11	98	5x11	132	5x11	137	6.3x12	154	6.3x12	178	8x12	187
100		5x11	101	5x11	115	6.3x7/11	137	6.3x11	148	6.3x12	176	8x12	220	10x13	231
220		6.3x12	159	6.3x12	193	6.3x11	215	8x12	264	10x13	302	10x16	330	10x16	396
330		6.3x12	212	8x12	225	8x12	292	8x12(10*13)	335	10x16	440	10x16	467	10x21	605
470		6.3x12	242	6.3x11	247	8x12	346	8x14	396	10x20	528	13x21	693	13x21	770
560		8x12	247	8x12	253	8x14	352	10x16	407	10x20	572	13x21	704	13x25	792
680		8x12	253	8x12	264	8x14	385	10x20/21	528	10x20	638	13x25	726	16x26	913
1000		8x14	440	8x12	484	10x16	561	10x20	550	13x25	908	13x26	990	16x32	1100
1200		8x14	460	10x17	510	10x20	550								
1500		8x20	495	10x20	539	10x20	583	13x21	715	13x25	946	16x32	1320	18x32	1562
2200		10x16	724	10x21	759	13x21	913	13/16x26	1029	16x26	1221	16x36	1463	18x35	1815
3300		10x20	825	13x21	902	13x26	1111	16x26	1298	16x36	1573	18x36	1815	22x40	2134
4700		13x26	1056	13x25	1188	16x26	1331	16x32	1562	18x35	1870	22x41	2310	22x50	2695
6800		16x26	1259	16x26	1463	16x36	1694	18x35	2002	22x40	2365	22x50	2750		
10000		16x26	1573	16x36	1848	18x35	2123	22x40	2354	22x50	2915				
15000		16x36	2013	18x35	2321	22x40	2662	22x50	3025						
22000		18x40	2519	22x40	2904	22x50	3300								

Cap (uF)	WV(V) (Code)	100 (2A)		160 (2C)		200 (2D)		250 (2E)		350 (2V)		400 (2G)		450 (2W)	
		D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.
0.1		5x11	1.6												
0.22		5x11	3.7												
0.33		5x11	5.5												
0.47		5x11	12	6.3x11	11	6.3x11	11	6.3x11	13	8x12	12	8x12	13	10x13	13
1.0		5x11	18	6.3x11	15	6.3x11	17	6.3x11	17	8x12	17	6.3x12	17	8x12	20
2.2		5x11	27	6.3x11	24	8x12	25	6.3x12	31	8x12	27	8x12	33	10x20	35
3.3		5x11	33	8x12	33	8x12	38	8x12	44	10x13	35	10x13	42	13x21	50
4.7		5x11	40	6.3x11	44	8x12	46	10x13	55	10x13	42	8x12	55	10x13	44
6.8		5x11	41	8x12	46	8x12	55	10x13	64	10x13	69	8x14	75	13x21	79
10		6.3x11	68	10x13	55	8x12	66	10x16	77	10x20	88	10x16	88	10x20	86
22		5x11(8x12)	102	10x16	110	10x20	148	10x20	143	13x25	137	13x21	137	16x26	144
33		8x12(10x13)	121	10x20	132	13x21	159	13x21	165	16x26	160	13x25	187	16x32	192
47		10x13	170	13x21	176	13x25	220	13x25	225	16x26	231	16x25	231	16x36	308
68		10x16	216	22x40	204	13x25	230	16x26	247	16x32	236	16x32	236	18x35	462
82		10x16	238	13x25	242	13x25	253	16x26	273	16x32	258	18x32	385	18x35	517
100		10x21	286	16x26	330	16x26	291	16x32	357	18x32	298	18x35	440	18x36	550
120		10x25	352	16x26	330	16x26	330	16x32	418	18x35	315	18x40	495	18x45	605
150		13x21	412	16x26	363	16x32	404	18x32	495	18x40	352	22x40	550		
220		13x26	528	16x36	473	18x32	583	22x35	770						
330		16x26	649	18x35	660	22x30	682								
470		16x25	880	18x40	797	22x40	913								
1000		18x35	1430	22x50	1083	25x50	1441								
2200		18x40	1815												

Typical failure modes and factors of aluminum electrolytic capacitors.

