

FM 105°C (CD113H)



- ⊙ Extremely low leakage current, standard size.
- ⊙ Used in TVs frequency channel conversion or weak signal import loop circuits.
- ⊙ Adapted to the ROHS directive (2002/95/EC).

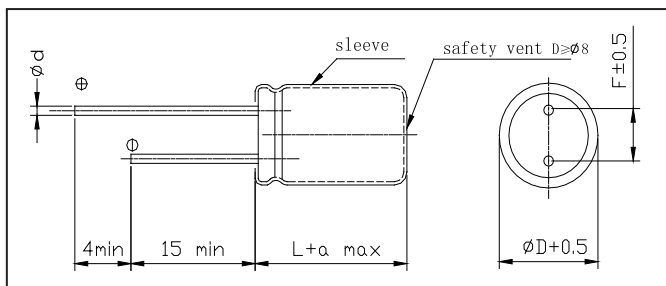
■ Specifications

Item	Performance Characteristics																											
Operating temperature range	-40°C~ +105°C																											
Rated voltage range	6.3 ~ 100 V																											
Nominal capacitance range	0.1 ~ 3300μF																											
Capacitance tolerance	± 20% (100Hz, +20°C)																											
Leakage current	$I \leq 0.002CV \cdot 0.4(\mu A) \cdot 2$ (at 20°C, after 2 minutes) (whichever is greater)																											
Dissipation factor (tg δ) (+20°C, 100Hz)	<table border="1"> <tr> <td>U_R (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>tg δ</td> <td>28</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.12</td> <td>0.10</td> </tr> </table>	U_R (V)	6.3	10	16	25	35	50	63	100	tg δ	28	0.24	0.20	0.16	0.14	0.12	0.12	0.10									
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tg δ	28	0.24	0.20	0.16	0.14	0.12	0.12	0.10																				
Temperature characteristics (Impedance ratio at 100Hz)	<table border="1"> <tr> <td>U_R (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>Z-25°C/+20°C</td> <td>4</td> <td>3</td> <td>2</td> <td>1.5</td> <td>1.5</td> <td>1.5</td> <td>1.5</td> <td>1.5</td> </tr> <tr> <td>Z-40°C/+20°C</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table>	U_R (V)	6.3	10	16	25	35	50	63	100	Z-25°C/+20°C	4	3	2	1.5	1.5	1.5	1.5	1.5	Z-40°C/+20°C	8	6	4	4	3	3	3	3
U_R (V)	6.3	10	16	25	35	50	63	100																				
Z-25°C/+20°C	4	3	2	1.5	1.5	1.5	1.5	1.5																				
Z-40°C/+20°C	8	6	4	4	3	3	3	3																				
Load life	After applying rated voltage for 1000 hours at +85°C and then resumed 16 hours: Capacitance change : ±20% Initial measured value Leakage current : ≤ Initial specified value Dissipation factor : ≤ 2 times Initial specified value																											
Shelf life	After storage for 1000 hours at +105°C, U_R to be applied for 30 minutes and then resumed 16 hours Capacitance change : ±20% Initial measured value Leakage current : ≤ Initial specified value Dissipation factor : ≤ 2 times Initial specified value																											

Low Lc

■ Case size table

Unit: mm



D	5	6	8	10	12	13	16
F	2.0	2.5	3.5	5.0		7.5	
d	0.5		0.5, 0.6	0.6		0.8	

αMAX	(L < 20)	1.5
	(L ≥ 20)	2.0

Dimensions

ØD × L(mm)

U _R		6.3		10V		16V		25V	
		0J		1A		1C		1E	
C _R (µF)	Code								
4.7	4R7							5×11	38
6.8	6R8					5×11	36	5×11	47
10	100					5×11	43	6×11	60
15	150					5×11	53	6×11	72
22	220			5×11	56	6×11	74	8×11	99
33	330			6×11	79	6×11	90	8×11	119
47	470			6×11	94	8×11	127	10×12	172
68	680			6×11	113	8×11	153	10×12	207
100	101			8×12	160	10×12	220	10×16	270
150	151	8×12	183	10×12	236	10×16	296	10×20	368
220	221	10×13	260	10×16	310	10×20	390	12×20	510
330	331	10×16	350	10×20	420	12×20	550	12×25	680
470	471	10×20	460	12×20	570	12×20	650	16×25	940
680	681	10×20	554	12×20	686	12×25	895	16×31	1246
1000	102	13×25	840	12×25	910	16×25	1210	16×35	1580
1500	152	13×25	1029	16×25	1297	16×31	1623		
2200	222	16×25	1440	16×31	1710	16×35	2200		
3300	332	16×35	2037	16×35	2209				

Low Lc

U _R		35V		50V		63V		100V	
		1V		1H		1J		2A	
C _R (µF)	Code								
0.1	0R1			5×11	6				
0.15	R15			5×11	7				
0.22	R22			5×11	8				
0.33	R33			5×11	10				
0.47	R47			5×11	12				
0.68	R68			5×11	14				
1.0	010			5×11	17				
1.5	1R5			5×11	21			5×11	23
2.2	2R2			5×11	26			6×11	30
3.3	3R3			5×11	32	6×11	36	6×11	36
4.7	4R7	5×11	34	6×11	43	6×11	43	8×11	51
6.8	6R8	5×11	41	6×11	52	6×11	52	10×12	73
10	100	6×11	57	8×11	75	8×11	75	10×16	97
15	150	8×11	82	8×11	92	10×12	109	10×20	130
22	220	8×11	99	10×12	131	10×16	144	10×20	158
33	330	10×12	144	10×16	176	10×16	176	10×20	193
47	470	10×12	172	10×16	210	10×20	230	12×25	288
68	680	10×16	227	10×20	277	10×20	277	12×25	346
100	101	10×20	300	12×20	380	12×25	420	16×25	488
150	151	12×20	422	12×25	514	12×25	514	16×31	654
220	221	12×25	550	16×25	720	16×31	792		
330	331	16×25	790	16×31	970	16×35	1018		
470	471	16×25	940	16×35	1210				
680	681	16×31	1246						

Rated ripple current(mA,+105°C,120Hz)