

# KM (CD268/CD81)

- Wide temperature range, 105°C, Load life: 1000~2000 hours, small size, large capacity
- Used in VCD, DVD, color-TV, air conditioning circuits etc.
- Adapted to the ROHS directive (2002/95/EC).

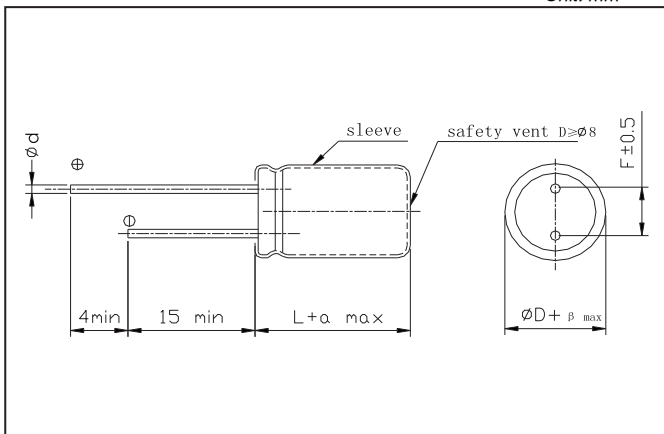


## Specifications

Item	Performance Characteristics																															
Operating temperature range	-40 ~ +105°C	-25 ~ +105°C																														
Rated voltage range	6.3 ~ 100V	160 ~ 450V																														
Nominal capacitance range	0.1~10000 $\mu$ F	0.47~220 $\mu$ F																														
Capacitance tolerance	$\pm 20\%$ (120Hz, +20°C)																															
Leakage current	$I \leq 0.01CV$ 3( $\mu$ A) (at 20°C, after 2 minutes) (whichever is greater)	$I \leq 0.02CV + 15$ ( $\mu$ A) (1 minute)																														
(tg $\delta$ ) Dissipation factor (+20°C, 120Hz)	<table border="1"> <thead> <tr> <th><math>U_R</math> (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> <th>160~450</th> </tr> </thead> <tbody> <tr> <td>tg <math>\delta</math></td> <td>0.25</td> <td>0.20</td> <td>0.17</td> <td>0.15</td> <td>0.12</td> <td>0.10</td> <td>0.09</td> <td>0.08</td> <td>0.20</td> </tr> </tbody> </table>										$U_R$ (V)	6.3	10	16	25	35	50	63	100	160~450	tg $\delta$	0.25	0.20	0.17	0.15	0.12	0.10	0.09	0.08	0.20		
$U_R$ (V)	6.3	10	16	25	35	50	63	100	160~450																							
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Temperature characteristics (Impedance ratio at 120Hz)	<table border="1"> <thead> <tr> <th><math>U_R</math> (V)</th> <th>6.3</th> <th>10</th> <th>16~50</th> <th>63~100</th> <th>160~250</th> <th>400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td>Z-25°C/+20°C</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td><math>\leq 6</math></td> <td><math>\leq 4</math></td> <td><math>\leq 4</math></td> </tr> <tr> <td>Z-40°C/+20°C</td> <td><math>\leq 8</math></td> <td><math>\leq 6</math></td> <td><math>\leq 4</math></td> <td><math>\leq 3</math></td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table>								$U_R$ (V)	6.3	10	16~50	63~100	160~250	400	450	Z-25°C/+20°C	-	-	-	-	$\leq 6$	$\leq 4$	$\leq 4$	Z-40°C/+20°C	$\leq 8$	$\leq 6$	$\leq 4$	$\leq 3$	-	-	-
$U_R$ (V)	6.3	10	16~50	63~100	160~250	400	450																									
Z-25°C/+20°C	-	-	-	-	$\leq 6$	$\leq 4$	$\leq 4$																									
Z-40°C/+20°C	$\leq 8$	$\leq 6$	$\leq 4$	$\leq 3$	-	-	-																									
Load life	After applying rated voltage for 1000 hours ( $\geq 13$ 2000 hours) at +105°C and then resumed 16 hours: Capacitance change : $\pm 20\%$ Initial measured value Leakage current : $\leq$ Initial specified value Dissipation factor : $\leq 2$ times Initial specified value																															
Shelf life	After storage for 1000 hours at +105°C and then resumed 16 hours Capacitance change : $\pm 20\%$ Initial measured value Leakage current : $\leq 2$ times Initial specified value Dissipation factor : $\leq 2$ times Initial specified value																															

## Case size table

Unit: mm



D	5	6	8	10	13	16, 18, 19	22
F	2.0	2.5	3.5	5.0		7.5	10
d	0.5		0.5, 0.6	0.6		0.8	

$\alpha$ MAX	(L < 20)	1.5	$\beta$ MAX	(D < 20)	0.5
	(L $\geq$ 20)	2.0		(D $\geq$ 20)	1.0

**Dimensions**

ØD × L(mm)

C <sub>R</sub> (µF)	U <sub>R</sub> Code	6.3V		10V		16V		25V		35V		50V		63V	
		0J		1A		1C		1E		1V		1H		1J	
0.1	0R1											5x11	3		
0.22	R22											5x11	4		
0.33	R33											5x11	5		
0.47	R47											5x11	6		
1	010											5x11	9		
2.2	2R2											5x11	11		
3.3	3R3											5x11	15		
4.7	4R7											5x11	18	5x11	20
10	100					5x11	20	5x11	25	5x11	25	5x11	25	5x11	30
22	220					5x11	30	5x11	35	5x11	35	5x11	40	6x11 8x11	50
33	330					5x11	40	5x11	40	5x11	50	6x11 8x11	60	8x11	60
47	470			5x11	45	5x11	50	5x11	50	6x11 8x11	65	6x11 8x11	70	8x12	90
100	101	5x11	60	5x11	80	6x11 8x11	80	6x11 8x11	90	8x12	110	8x12	120	10x13	150
220	221	6x11 8x11	100	6x11 8x11	110	8x12	140	8x12	150	10x13	190	10x16	240	10x20	270
330	331	8x11	120	8x12	160	8x12	180	10x13	220	10x16	260	10x20	320	13x20	380
470	471	8x12	170	8x12	190	10x13	250	10x16	290	10x20	350	13x20	430	13x25	500
1000	103	10x13	300	10x16	360	10x20	440	13x20	540	13x25	620	16x25	790	16x31	900
2200	222	13x20	580	13x20	620	13x25	700	16x25	880	16x31	1030	18(19)x35	1230	18(19)x40	1310
3300	332	13x20	670	13x25	800	16x25	970	16x31	1120	18(19)x35	1320	18(19)x40	1400	22x40	1730
4700	472	16x25	1000	16x25	1050	16x31	1240	18(19)x35	1440	18(19)x40	1540	22x40	1780		
6800	682	16x25	1120	16x31	1300	18(19)x35	1530	18(19)x40	1630	22x40	1880				
10000	103	18(19)x35	1320	18(19)x35	1620	18(19)x40	1730	22x40	2000						

**Dimensions**

ØD × L(mm)

C <sub>R</sub> (µF)	U <sub>R</sub> Code	100V		160V		200		250V		400V		450V	
		2A		2C		2D		2E		2G		2H	
0.1	0R1	5x11	3										
0.22	R22	5x11	4										
0.33	R33	5x11	5										
0.47	R47	5x11	6	5x11	8	8x11	6	8x11	6				
1	010	5x11	9	5x11	12	8x11	9	8x11	9	10x16	15		
2.2	2R2	5x11	15	8x11	15	8x11	15	8x12	15	10x16	20	10x16	29
3.3	3R3	5x11	18	8x12	20	8x12	20	10x13	20	10x16 10x20	25	10x20	35
4.7	4R7	5x11	20	8x12	25	10x13	30	10x13	30	13x20 16x25	40	13x20	50
10	100	6x11 8x11	35	10x13	40	10x16	45	10x20	45	10x20 13x20	70	13x25	75
22	220	8x12	65	10x20	70	10x20	70	13x25	80	16x31	110	16x31	110
33	330	10x13	95	13x20	110	13x25	110	13x25	100	18(19)x35	180	18(19)x35	150
47	470	10x16	120	13x25	140	13x25	140	16x25	140			22x40	230
100	101	13x20	220	16x25	250	16x31	250	18(19)x35	260				
220	221	16x25	420	18(19)x35	430								
330	331	16x31	510										
470	471	18(19)x31	680										
1000	102	18(19)x40	1200										

Rated ripple current(mA, +105°C,120Hz)