

# FB

105°C (CD71H)



◎ Bi-polar Standard series, used in polarity reverse and change circuits.

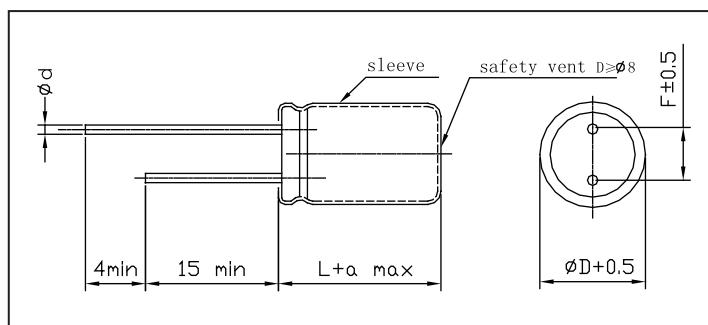
◎ Adapted to the ROHS directive (2002/95/EC).

## ■ Specifications

Item	Performance Characteristics								
Operating temperature range	-40°C~ +105°C								
Rated voltage range	6.3 ~ 100 V								
Nominal capacitance range	0.47~ 6800μF								
Capacitance tolerance	± 20% (120Hz, +20°C)								
Leakage current	$I \leq 0.03CV + 3(\mu A)$ (at 20°C, after 2 minutes)								
(tg δ) Dissipation factor (+20°C, 120Hz)	$U_R$ (V)	6.3	10	16	25	35	50	63	100
	tg δ	0.28	0.24	0.22	0.20	0.15	0.14	0.10	0.09
Temperature characteristics (Impedance ratio at 120Hz)	$U_R$ (V)	6.3	10	16	25	35	50	63	100
	Z-25°C / +20°C	4	3	2	2	2	2	2	2
	Z-40°C / +20°C	10	8	6	5	4	4	3	3
Load life	After applying rated voltage for 1000 hours at 105°C (with the polarity inverted every 250 hours) 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 and then resumed 16 hours Capacitance change : ±20% Initial measured value Leakage current : ≤ 2 times Initial specified value Dissipation factor : ≤ 2 times Initial specified value								

## ■ Case size table

Unit: mm



D	5	6.3	8	10	13	16	18(19)
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
d	0.5	0.5	0.5	0.6			0.8

α MAX	(L < 20) 1.5
	(L ≥ 20) 2.0

## Dimensions

$\text{ØD} \times L(\text{mm})$

		$U_R$	6.3V		10V		16V		25V		35V	
$C_R(\mu\text{F})$	Code		0J		1A		1C		1E		1V	
0.47	R47											
1.0	010											
2.2	2R2											
3.3	3R3											
4.7	4R7										5x11	34
10	100					5x11	47	5x11	42	5x11	43	
22	220			5x11	57	5x11	57	6.3x11	65	6.3x11	73	
33	330	5x11	64	5x11	64	5x11	40	6.3x11	80	8x12	100	
47	470	5x11	76	5x11	76	6.3x11	95	6.3x11	95	8x12	120	
100	101	6.3x11	125	6.3x11	125	8x12	160	8x12	160	10x16	230	
220	221	8x12	215	8x12	215	10x13	275	10x16	305	13x20	410	
330	331	8x12	265	10x16	345	10x16	375	13x20	450	13x20	505	
470	471	10x13	370	10x16	410	10x20	485	13x20	540	13x25	655	
1000	102	10x20	650	13x20	720	16x25	855	16x25	950	16x30	1140	
2200	222	13x25	1160	16x25	1280	16x30	1510	18(19)x35	1620			
3300	332	16x25	1570	16x30	1690	18(19)x35	1980					
4700	472	16x30	2020	18(19)x35	2160							
6800	682	18(19)x35	2600									

$\text{ØD} \times L(\text{mm})$

		$U_R$	50V		63V		100	
$C_R(\mu\text{F})$	Code		1H		1J		2A	
0.47	R47		5x11	11			5x11	14
1.0	010		5x11	17			5x11	21
2.2	2R2		5x11	25			6.3x11	34
3.3	3R3		5x11	27	5x11	28	6.3x11	39
4.7	4R7		5x11	34	6.3x11	34	6.3x11	47
10	100		6.3x11	52	6.3x11	57	8x12	71
22	220		8x12	89	8x12	95	10x16	135
33	330		8x12	105	10x13	135	13x20	220
47	470		10x13	150	10x16	180	13x20	240
100	101		10x20	265	13x20	320	16x25	425
220	221		13x25	480	16x25	575	18(19)x35	720
330	331		16x25	650	16x30	655		
470	471		16x30	835	18(19)x35	965		

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