常州华威电子有限公司
CHANGZHOU HUA WEI ELECTRONICS CO.,LTD.

LS （CD11S）

◎ Extremely low and stable leakage current characteristics.

◎ Close capacitance tolerance ±20%(±10%).

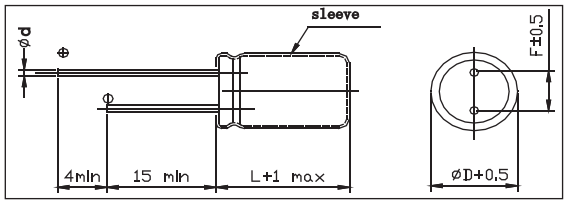
◎ Adapted to the ROHS directive（2002/95/EC）.

Specifications

Item	Performance Characteristics
Operating temperature rang	-40 °C ~ +85°C
Rated voltage range	6.3 ~ 50V
Nominal capacitance range	0.1 ~220μF
Capacita nce tolerance	±20% (120Hz, +20°C)
Leakage current	I≤ 0.002CV 0.4μA 2（at 20°C , after 2 minutes）
Dissipation factor （tgδ） (+20 °C, 120Hz)	U_R（V） 6.3 10 16 25 35 50 tgδ 0.24 0.20 0.16 0.14 0.12 0.10
Temperature characteristics (Impedance ratio at 120Hz)	U_R（V） 6.3 10 16 25 35 50 Z-25°C/Z+20°C 4 3 2 2 2 2 Z-40°C/Z+20°C 8 6 4 4 3 3
Load life	After applying rated voltage with specified ripple current for 1000 hours at +85°C and then resumed 16 hours: Capacitance change : ±25% Initial measured value Leakage current : ≤ Initial specified value Dissipation factor : ≤ 2 times Initial specified value
Shelf life	After storage for 1000 hours at +85°C, U_R to be applied for 30 minutes and then resumed 16 hours Capacitance change : ±25% Initial measured value Leakage current : ≤ Initial specified value Dissipation factor : ≤ 2 times Initial specified value

Case table

Unit: mm



D	4	5	6	8
F	1.5	2.0	2.5	3.5
d	0.45			0.5

Frequencycoefficient

U(V) \ (Hz)	50	120	300	1K	10K~
≤47	0.75	1.00	1.35	1.57	2.00
47~220	0.80	1.00	1.23	1.34	1.50

Temperature coefficient

Temperature(°C)	~55	60	70	85
Factor	1.65	1.50	1.30	1.00

Low Lc

Dimensions

Voltage (Code)		6.3V（0J）		10V（1A）		16V（1C）		25V（1E）	
Cap.(μF)	Code	Case Size	Ripple current	Case Size	Ripple current	Case Size	Ripple current	Case Size	Ripple current
10	100					4x7	29	5x7	33
22	220	4x7	34	5x7	38	5x7	44	6x7	51
33	330	5x7	42	5x7	47	6x7	57	6x7	63
47	470	5x7	50	6x7	59	6x7	68	8x7	78
100	101	6x7	77	8x7	96	8x7	107		
220	221	8x7	130						

Maximum Allowable Ripple Current (m Arms) at 85°C 120Hz

Voltage (Code)		35V（1V）		50V（1H）					
Cap.(μF)	Code	Case Size	Ripple current	Case Size	Ripple current				
0.1	0R1			4x7	1.0				
0.22	R22			4x7	2.3				
0.33	R33			4x7	3.5				
0.47	R47			4x7	5.0				
1	010			4x7	10				
2.2	2R2			4x7	19				
3.3	3R3			4x7	24				
4.7	4R7	4x7	24	5x7	29				
10	100	5x7	36	6x7	44				
22	220	6x7	57	8x7	65				
33	330	8x7	72						
47	470								
100	101								
220	221								

Maximum Allowable Ripple Current (m Arms) at 85°C 120Hz