

2000h at 85°C

- Features
  - 600V to 650V standard at 85°C
  - RoHS Compliant
- Applications
  - High Professional Inverters and Power Supplies



SCREW

### Specifications

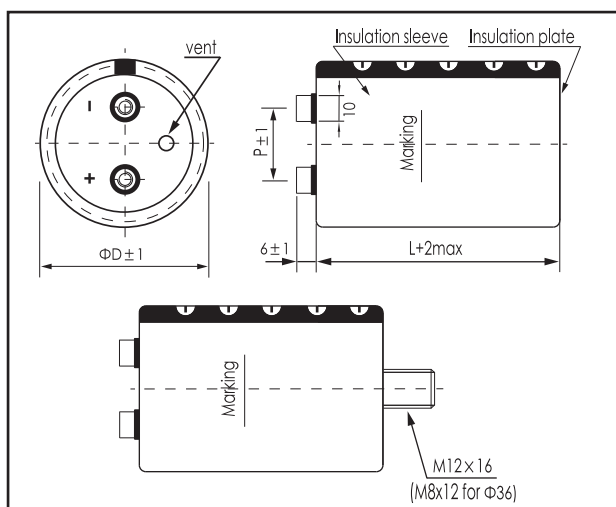
Items	Characteristics
Operating Temperature Range	-25 ~ +85°C
Rated Voltage $U_R$	600 ~ 650V <sub>dc</sub>
Capacitance Range	1000 ~ 5000μF
Capacitance Tolerance	± 20% (M) (at 20°C, 120Hz)
Leakage Current $I_L$	$I_L=0.01C_R U_R$ (μA) or 5mA, whichever is smaller. ( $C_R$ : Nominal Capacitance, in μF) (at 20°C, 5minutes)
Dissipation Factor $\tan \delta$	0.25 max (at 20°C, 120Hz)

	Useful Life		Load Life	Endurance Life	Shelf Life
Lifetime	>4000h	>65000h	2000h	2000h	500h
Leakage Current $I_L$	Not more than specified value		Not more than specified value	Not more than specified value	Not more than specified value
Capacitance Change $\Delta C$	Within ± 30% of initial value		Within ± 20% of initial value	Within ± 10% of initial value	Within ± 20% of initial value
Dissipation Factor $\tan \delta$	Not more than 300% of specified value		Not more than 200% of specified value	Not more than 130% of specified value	Not more than 200% of specified value
Condition:	$U_R$ $I_R$ 85°C	$U_R$ $1.2 \times I_R$ 40°C	$U_R$ $I_R$ 85°C	$U_R$ 85°C	85°C

\*Shelf Life test:  $U_R$  to be applied for 60min, >24h before measurement

### Dimensions

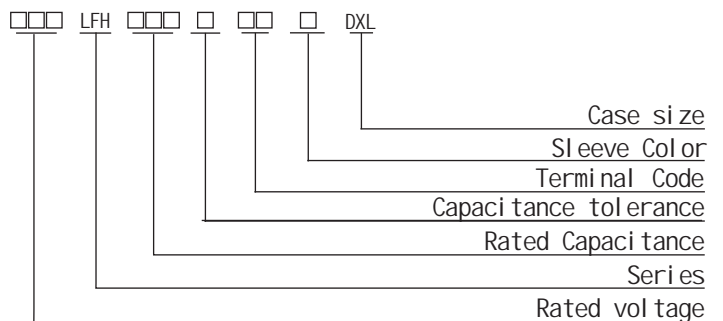
mm



ΦD/mm	51	64	77	90	101
P/mm	22.0	28.2	31.4	31.4	41.5

\*Hex head screw M5 x 10 and M6 x 12 are standard screws. Longer screws are available on request.  
 \*Max tightening torque for screw terminal M5: 3Nm, M6: 4Nm.  
 Max torque for bolt mounting M12: 12.5Nm.  
 \*Screws, Bracket and cap nut will be delivered separately. See "Accessories" for shape and dimensions.

### Part Number System



### Ripple Current Coefficient

Frequency (Hz)	50/60	120	300	1k	>10k
Coefficient	0.80	1.00	1.10	1.30	1.40
Ambient Temp (°C)	40		60		85
Coefficient	1.89		1.67		1.00

The useful life can be prolonged by operating capacitor at loads below the rated values (e.g. lower operating voltage, Rms ripple current or ambient temperature) and by appropriate cooling measures.  
 It is advisable not to apply a ripple current exceeding the rated ripple current without any cooling measures as this will shorten capacitor's life.

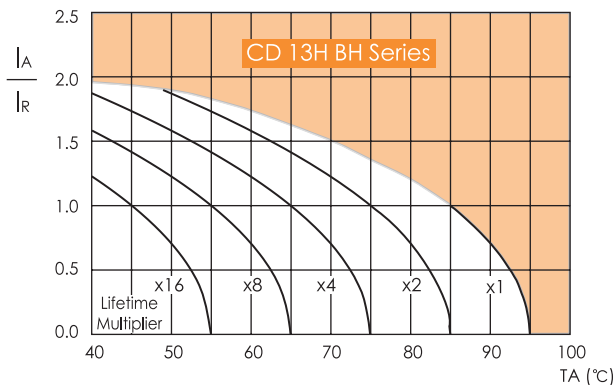
## Ratings for CD 13H Series

SCREW

$U_R$ (Surge Voltage) Code	Rated Capacitance	Max.ESR 20°C, 120Hz	Typ ESR 20°C, 120Hz	Rated Ripple Current 85°C,120Hz	Size ΦD x L
(V)	(μF)	(mΩ)	(mΩ)	(Arms)	(mm)
600 (650) 2S	1200	242	121	7.7	64×96
	1500	224	112	9.3	64×115
	1800	194	97	10.1	77×96
	2200	162	81	12.0	77×115
	2700	132	66	14.0	77×130
	3300	88	44	16.4	77×155
	3300	88	44	16.4	90×131
	3900	74	37	17.8	90×131
	4700	62	31	21.0	90×157
	5600	56	28	24.5	90×196
650 (700) S6	1000	300	150	6.0	64×130
	1200	266	133	6.7	77×115
	1500	212	106	8.1	77×130
	1800	176	88	9.8	77×155
	2200	144	72	10.7	90×131
	2700	128	64	12.8	90×157
	3300	106	53	14.7	90×171
	3900	94	47	17.9	90×196
	4700	78	39	21.6	90×196
	5600	70	35	24.9	101×220

Mounting code( "B" for bolt mounting, "Y/I/N" for bracket mounting )  
Terminal options(A,B,C see "Dimensions" for details.)

## Lifetime Diagram



Capacitor diameter d(mm)	length l(mm)	Packing units (pcs.)	
51	all	42	
63.5	all	30	
77	all	12	15
89	all	8	
100	all	6	