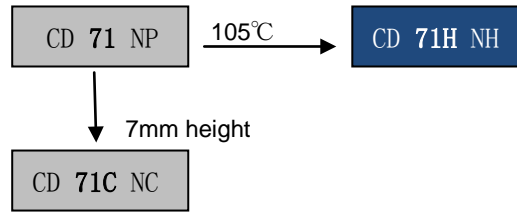


CD 71H NH Series



2000h at 105°C

- Load life of 2000 hours at 105°C
- Bi-polar



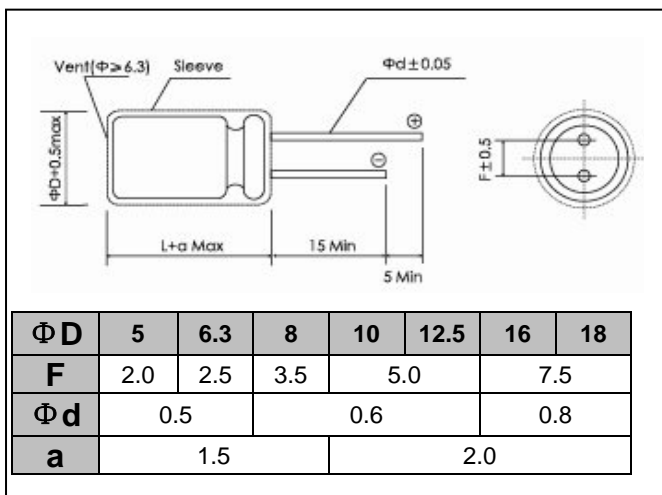
Items	Characteristics																																						
Operating Temperature Range(°C)	-55 ~ +105																																						
Rated Voltage Range(V)	6.3 ~160																																						
Capacitance Tolerance (20°C,120Hz)	±20%																																						
Leakage Current (μA)	After 2 minutes at 20°C application of rated voltage, leakage current is not more than 0.06CV or 10, whichever is greater. C:Nominal Capacitance(μF) V:Rated Voltage(V)																																						
Dissipation Factor (20°C, 120Hz)	<table border="1"> <thead> <tr> <th>Rated Voltage(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</th> </tr> </thead> <tbody> <tr> <td>Tan δ(max)</td> <td>0.24</td> <td>0.24</td> <td>0.20</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.15</td> </tr> </tbody> </table>	Rated Voltage(V)	6.3	10	16	25	35	50	63	100	160	Tan δ(max)	0.24	0.24	0.20	0.20	0.16	0.14	0.12	0.10	0.15																		
	Rated Voltage(V)	6.3	10	16	25	35	50	63	100	160																													
Tan δ(max)	0.24	0.24	0.20	0.20	0.16	0.14	0.12	0.10	0.15																														
When nominal capacitance is over 1000uFtan δ shall be added 0.02to the listed value with increase of every 1000uF																																							
Stability at Low Temperature (Impedance Ratio at 120Hz)	<table border="1"> <thead> <tr> <th>Rated Voltage(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</th> </tr> </thead> <tbody> <tr> <td>Z_{-25°C}/Z_{+20°C}</td> <td>4</td> <td>3</td> <td colspan="4">2</td> <td colspan="3">4</td> </tr> <tr> <td>Z_{-40°C}/Z_{+20°C}</td> <td>10</td> <td>8</td> <td>6</td> <td>4</td> <td colspan="3">4</td> <td>-</td> </tr> </tbody> </table>	Rated Voltage(V)	6.3	10	16	25	35	50	63	100	160	Z _{-25°C} /Z _{+20°C}	4	3	2				4			Z _{-40°C} /Z _{+20°C}	10	8	6	4	4			-									
	Rated Voltage(V)	6.3	10	16	25	35	50	63	100	160																													
	Z _{-25°C} /Z _{+20°C}	4	3	2				4																															
Z _{-40°C} /Z _{+20°C}	10	8	6	4	4			-																															

Lifetime	Useful Life		Load Life	Endurance Test	Shelf Life
	4000h	180000h	2000h	2000h	1000h
Leakage Current	Not more than specified value		Not more than specified value	Not more than specified value	Not more than specified value
Capacitance Change	Within ±50% of initial value		Within ±20% of initial value	Within ±20% of initial value	Within ±20% of initial value
Dissipation Factor	Not more than 300% of specified value		Not more than 150% of specified value	Not more than 150% of specified value	Not more than 150% of specified value
Condition: Applied Voltage Applied Current Applied Temperature	U _R I _R 105°C	U _R 1.4 x I _R 40°C	U _R I _R 105°C	U _R I _R = 0 105°C	U _R = 0 I _R = 0 105°C After test: U _R to be applied for 30min >24h before measurement

Note:The life test excluding shelf life should be conducted with the polarity inverted every 250hrs.

Dimensions

mm



Frequency Coefficient

Frequency Cap(μF)	50-60Hz	120Hz	1KHz	10KHz	100KHz
	0.47~4.7	0.65	1.00	1.35	2.30
10~47	0.75	1.00	1.25	1.75	1.80
100~1000	0.80	1.00	1.15	1.40	1.50
2200~6800	0.85	1.00	1.03	1.08	1.08

Temperature Coefficient

Temperature(°C)	+85	+105
Coefficient	1.35	1

Ratings for CD 71H NH Series

U _R (Surge Voltage) Code	Rated Capacitance	Max ESR 20°C, 120Hz	Rated Ripple Current 105°C, 120Hz	Size ΦD×L	P/N	
(v)	(μF)	(Ω)	(mArms)	(mm)	-	
6.3 (7.2) 0J	33	9.7	45	5x11.5	ECR0JNH330M□□050011	
	47	6.8	54	5x11.5	ECR0JNH470M□□050011	
	100	3.2	90	6.3x11.5	ECR0JNH101M□□063011	
	220	1.5	150	8x11.5	ECR0JNH221M□□080011	
	330	0.97	185	8x11.5	ECR0JNH331M□□080011	
	470	0.68	260	10x12.5	ECR0JNH471M□□100012	
	1000	0.32	460	10x20	ECR0JNH102M□□100020	
	2200	0.16	820	12.5x25	ECR0JNH222M□□125025	
	3300	0.11	1110	16x25	ECR0JNH332M□□160025	
	4700	0.09	1430	16x31.5	ECR0JNH472M□□160031	
	6800	0.07	1830	18x35.5	ECR0JNH682M□□180035	
	10 (13) 1A	22	15	37	5x11.5	ECR1ANH220M□□050011
33		9.7	45	5x11.5	ECR1ANH330M□□050011	
47		6.8	54	5x11.5	ECR1ANH470M□□050011	
100		3.2	90	6.3x11.5	ECR1ANH101M□□063011	
220		1.5	150	8x11.5	ECR1ANH221M□□080011	
330		0.97	240	10x16	ECR1ANH331M□□100016	
470		0.68	290	10x16	ECR1ANH471M□□100016	
1000		0.32	510	12.5x20	ECR1ANH102M□□125020	
2200		0.16	910	16x25	ECR1ANH222M□□160025	
3300		0.11	1200	16x31.5	ECR1ANH332M□□160031	
4700		0.09	1520	18x35.5	ECR1ANH472M□□180035	
16 (20) 1C		10	27	27	5x11.5	ECR1CNH100M□□050011
	22	12	40	5x11.5	ECR1CNH220M□□050011	
	33	8.0	49	5x11.5	ECR1CNH330M□□050011	
	47	5.7	67	6.3x11.5	ECR1CNH470M□□063011	
	100	2.7	110	8x11.5	ECR1CNH101M□□080011	
	220	1.2	195	10x12.5	ECR1CNH221M□□100012	
	330	0.80	265	10x16	ECR1CNH331M□□100016	
	470	0.57	345	10x20	ECR1CNH471M□□100020	
	1000	0.27	605	12.5x25	ECR1CNH102M□□125025	
	2200	0.13	1070	16x31.5	ECR1CNH222M□□160031	
	3300	0.10	1400	18x35.5	ECR1CNH332M□□180035	
	25 (32) 1E	10	27	27	5x11.5	ECR1ENH100M□□050011
22		12	46	6.3x11.5	ECR1ENH220M□□063011	
33		8.0	56	6.3x11.5	ECR1ENH330M□□063011	
47		5.7	67	6.3x11.5	ECR1ENH470M□□063011	
100		2.7	110	8x11.5	ECR1ENH101M□□080011	
220		1.2	215	10x16	ECR1ENH221M□□100016	
330		0.80	320	12.5x20	ECR1ENH331M□□125020	
470		0.57	380	12.5x20	ECR1ENH471M□□125020	
1000		0.27	670	16x25	ECR1ENH102M□□160025	
2200		0.13	1140	18x35.5	ECR1ENH222M□□180035	
35 (44) 1V		4.7	45	21	5x11.5	ECR1VNH47M□□050011
		10	21	30	5x11.5	ECR1VNH100M□□050011
	22	9.7	51	6.3x11.5	ECR1VNH220M□□063011	
	33	6.4	72	8x11.5	ECR1VNH330M□□080011	
	47	4.5	86	8x11.5	ECR1VNH470M□□080011	
	100	2.1	160	10x12.5	ECR1VNH101M□□100012	
	220	0.97	290	10x20	ECR1VNH221M□□100020	
	330	0.64	350	12.5x25	ECR1VNH331M□□125025	
	470	0.45	465	16x25	ECR1VNH471M□□160025	
	1000	0.21	805	16x31.5	ECR1VNH102M□□160031	

U _R (Surge Voltage) Code	Rated Capacitance	Max ESR 20°C, 120Hz	Rated Ripple Current 105°C, 120Hz	Size ΦD×L	P/N	
(v)	(μF)	(Ω)	(mArms)	(mm)	-	
50 (63) 1H	0.47	395	7	5x11.5	ECR1HNR47M□□050011	
	1	186	10	5x11.5	ECR1HNH010M□□050011	
	2.2	84	15	5x11.5	ECR1HNH2R2M□□050011	
	3.3	56	18	5x11.5	ECR1HNH3R3M□□050011	
	4.7	40	22	5x11.5	ECR1HNH4R7M□□050011	
	10	19	37	6.3x11.5	ECR1HNH100M□□063011	
	22	8.4	63	8x11.5	ECR1HNH220M□□080011	
	33	5.6	77	8x11.5	ECR1HNH330M□□080011	
	47	4.0	105	10x12.5	ECR1HNH470M□□100012	
	100	1.9	190	10x20	ECR1HNH101M□□100020	
	220	0.84	340	12.5x25	ECR1HNH221M□□125025	
	330	0.56	460	16x25	ECR1HNH331M□□160025	
63 (79) 1J	470	0.40	590	16x31.5	ECR1HNH471M□□160031	
	3.3	48	20	5x11.5	ECR1JNH3R3M□□050011	
	4.7	34	24	6.3x11.5	ECR1JNH4R7M□□063011	
	10	16	40	6.3x11.5	ECR1JNH100M□□063011	
	22	7.2	68	8x11.5	ECR1JNH220M□□080011	
	33	4.8	98	10x12.5	ECR1JNH330M□□100012	
	47	3.4	130	10x16	ECR1JNH470M□□100016	
	100	1.6	225	12.5x20	ECR1JNH101M□□125020	
	220	0.72	405	16x25	ECR1JNH221M□□160025	
	330	0.48	535	16x31.5	ECR1JNH331M□□160031	
	470	0.34	680	18x35.5	ECR1JNH471M□□180035	
	80 (100) 1K	2.2	72	16	5x11.5	ECR1KNH2R2M□□050011
3.3		48	23	6.3x11.5	ECR1KNH3R3M□□063011	
4.7		34	27	6.3x11.5	ECR1KNH4R7M□□063011	
10		16	46	8x11.5	ECR1KNH100M□□080011	
22		7.2	89	10x16	ECR1KNH220M□□100016	
33		4.8	105	10x16	ECR1KNH330M□□100016	
47		3.4	140	10x20	ECR1KNH470M□□100020	
100		1.6	245	12.5x25	ECR1KNH101M□□125025	
220		0.72	435	16x31.5	ECR1KNH221M□□160031	
330		0.48	570	18x35.5	ECR1KNH331M□□180035	
100 (125) 2A		0.47	282	8	5x11.5	ECR2ANH47M□□050011
		1	133	12	5x11.5	ECR2ANH010M□□050011
	2.2	60	20	6.3x11.5	ECR2ANH2R2M□□063011	
	3.3	40	25	6.3x11.5	ECR2ANH3R3M□□063011	
	4.7	28	30	6.3x11.5	ECR2ANH4R7M□□063011	
	10	13	50	8x11.5	ECR2ANH100M□□080011	
	22	6.0	97	10x16	ECR2ANH220M□□100016	
	33	4.0	140	12.5x20	ECR2ANH330M□□125020	
	47	2.8	170	12.5x20	ECR2ANH470M□□125020	
	100	1.3	300	16x25	ECR2ANH101M□□160025	
	220	0.60	510	18x35.5	ECR2ANH221M□□180035	
	160 (200) 2C	3.3	60	45	10x16	ECR2CNH3R3M□□100016
4.7		42	55	10x16	ECR2CNH4R7M□□100016	
10		20	103	125x20	ECR2CNH100M□□125020	
22		9.1	168	12.5x25	ECR2CNH220M□□125025	
33		6.01	228	16x25	ECR2CNH330M□□160025	
47		4.21	312	16x35.5	ECR2CNH470M□□160035	
100		2.0	403	18x35.5	ECR2CNH101M□□180035	

Customer products are available on request.

Lifetime Diagram

