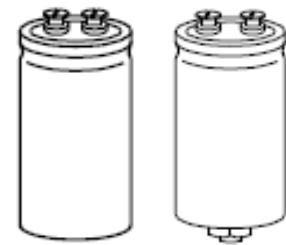


HN CD138 型

- 耐高纹波,长寿命,105°C 5000 小时 ,可用于大功率电源、UPS 不间断电源、变频器等电路中.
High ripple current ,Long life ,Load life of 5000 hours at 105°C.
Used large power source,Uninterruptible power supplies ,Frequency converter circuit .etc.
- ROHS 指令已对应完毕。Adapted to the ROHS directive



主要技术性能 Specifications

项目 Item	特性 Performance Characteristics	
使用温度范围 Operating temperature range	-25°C ~ +105°C	
额定电压范围 Rated voltage range	350 ~ 450 V	
标称电容量允许偏差 Capacitance tolerance	±20% (120Hz, +20°C)	
漏电流 Leakage current	$I \leq 0.01CV(\mu A)$ 或5mA 5分钟 取较小值 (at 20°C, after 5 minutes , Whichever is smaller)	
损耗角正切值 (tg δ) Dissipation factor (+20°C, 120Hz)	≤ 0.15	
温度特性 Temperature characteristics (Impedance ratio at 120Hz)	Rated Voltage (V)	350~450
	$Z_{-25^{\circ}C}/Z_{+20^{\circ}C}$	8
高温贮存 Shelf life	+105°C,1000 小时贮存后, 加额定工作电压处理 30 分钟,恢复 16 小时后: After storage for 1000 hours at +105°C , U_R to be applied for 30 minutes and then resumed 16 hours 电容量变化率 Capacitance change : ±20%初始测量值以内 Initial measured value 漏电流 Leakage current : ≤初始规定值 Initial specified value 损耗角正切值 Dissipation factor : ≤2倍初始规定值 2times Initial specified value	

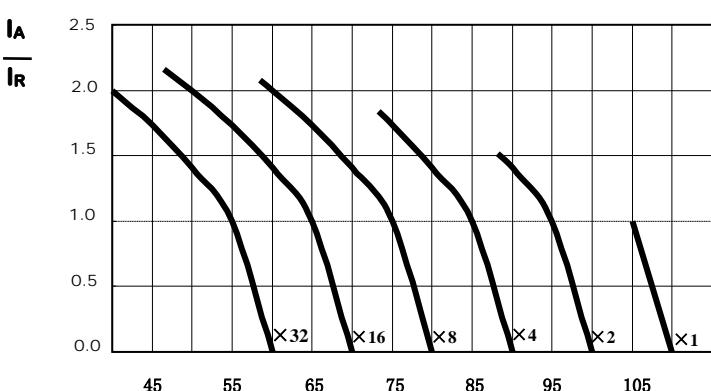
	使用寿命 (Useful Life)		负载寿命 (Load Life)	耐久性测试 (Endurance Test)
寿命时间 (Lifetime)	9000h	>200000h	5000h	5000h
漏电流 (Leakage Current)	≤初始规定值 Not more than specified value		≤初始规定值 Not more than specified value	≤初始规定值 Not more than specified value
电容量变化率 (Capacitance Change)	±30% 初始测量值内 Within ±30% initial value		±20% 初始测量值内 Within ±20% initial value	±10% 初始测量值内 Within ±10% initial value
损耗角正切值 (Dissipation Factor)	≤ 3 倍初始规定值 Not more than 300% of specified value		≤2倍初始规定值 Not more than 200% of specified value	≤1.3 倍初始规定值 Not more than 130% of specified value
应用条件 (Condition): 应用电压 (Applied Voltage) 应用电流 (Applied Current) 应用温度 (Applied Temperature) 失效率 (Outlier Percentage)	U_R I_R 105°C ≤1%	U_R $1.4 \times I_R$ 50°C ≤1%	U_R I_R 105°C 0%	U_R $I_R=0$ 105°C IEC60384

纹波电流的相关参数 Multiplier for Ripple Current

频率系数 Frequency Coefficient

Frequency (Hz) Rated	50	100 (120)	300	1k	≥10K
Voltage (V) 350~450	0.80	1.00	1.10	1.25	1.50

寿命时间图 Life Time Graph



此图表示电容的使用寿命时间

The graphs shows a typical trend of the standard capacitor useful life.

技术参数 Technical data

Rated Voltage	Surge Voltage	Rated Capacitance	Dissipation Factor MAX	Max ESR 20°C, 120Hz	Typ ESR 20°C, 120Hz	Max Ripple Current 105°C,120Hz	SIZE
(V.D.C)	(V.D.C)	(μ F)	-	(mΩ)	(mΩ)	(Arms)	Φ D×L(mm)
350	400	1000	0.15	150	100	4.2	51×80
		1500	0.15	105	70	5.2	51×80
		2200	0.15	71	47	7.0	51×105
		2700	0.15	59	39	7.2	63.5×90
		3300	0.15	50	33	8.5	63.5×110
		3900	0.15	44	29	9.6	63.5×120
		4700	0.15	38	25	11.5	63.5×145
		4700	0.15	38	25	11.5	76×115
		5600	0.15	30	20	13.4	76×130
		6800	0.15	26	17	15.2	76×150
		8200	0.15	20	13	18.4	76×170
		8200	0.15	18	12	18.4	89×145
		10000	0.15	17	11	21.2	76×200
		10000	0.15	17	11	21.0	89×155
400	450	1000	0.15	150	100	4.3	51×80
		1500	0.15	98	65	5.8	51×105
		2200	0.15	59	39	7.6	51×130
		2200	0.15	68	45	7.6	63.5×105
		2700	0.15	53	35	7.9	63.5×115
		3300	0.15	44	29	9.2	63.5×130
		3300	0.15	44	29	9.4	76×105
		3900	0.15	36	24	10.8	76×120
		4700	0.15	30	20	12.6	76×145
		5600	0.15	26	17	14.5	76×155
		6800	0.15	23	15	17.3	76×190
		6800	0.15	21	14	17.8	89×155
		8200	0.15	20	13	20.0	76×220
		8200	0.15	18	12	20.2	89×170
		10000	0.15	15	10	23.2	89×190
450	500	1000	0.15	143	95	4.7	51×105
		1500	0.15	95	63	6.2	51×120
		2200	0.15	65	43	7.3	63.5×120
		2700	0.15	50	33	8.2	63.5×130
		3300	0.15	41	27	10.3	76×130
		3900	0.15	35	23	11.6	76×150
		4700	0.15	30	20	13.6	76×170
		5600	0.15	26	17	15.5	76×190
		5600	0.15	24	16	15.5	89×150
		6800	0.15	21	14	18.3	76×220
		6800	0.15	20	13	18.3	89×175
		8200	0.15	15	10	22.5	89×220
		10000	0.15	12	8	25.2	89×235