



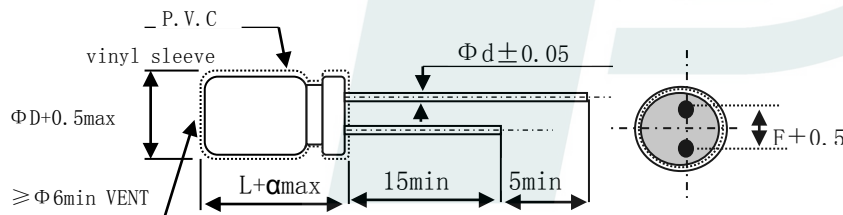
NH Bi-polar, wide temperature range

☆ Suitable for using in polarity reversal circuits, such as signal coupling circuits and speakers, etc.

■ Specifications

Operating temperature range	-40~+105°C						
Rated voltage range	6.3~50V DC						
Nominal capacitance range	0.47~470μF						
Capacitance tolerance	±20% (25°C, 120Hz)						
Leakage current	$1 \leq 0.03C_R U_R$ or 3(μA) Whichever is greater (2minutes)						
25°C, 120HZ	U_R (V)	6.3	10	16	25	35	50
(tg δ) Dissipation factor	tg δ	0.24	0.20	0.18	0.16	0.14	0.12
(120HZ)	U_R (V)	6.3	10	16	25	35	50
Temperature characteristics	Z-25°C / Z+20°C	4	3	2	2	2	2
	Z-40°C / Z+20°C	7	5	5	4	4	4
Load life	After applying rated voltage with specified ripple current for 1500×2hours at +105°C and then resumed 16hours; Capacitance change : Within ±20% of the initial measured value Leakage current : Not more than the initial specified value Dissipation factor: Not more than 150% of the initial specified value						
Shelf life	After storage for 2000hours at +105°C then resumed 16hours; Capacitance change : With ±20% of the initial measured value Leakage current : Not more than the initial specified value Dissipation factor : Not more than 150% of the initial specified value						

■ Case size table



	Unit:mm				
ΦD	5	6	8	10	12
F	2.0	2.5	3.5	5.0	
Φd	0.5			0.6	
α	1.0			1.5	

■ Nominal capacitance, rated voltage, rated ripple current and case size table

C_R (μF)	U_R (V)	code	6.3 (0J)		10 (1A)		16 (1C)		25 (1E)		35 (1V)		50 (1H)	
			D×L (mm)	Ripple (mA)	D×L (mm)	Ripple (mA)	D×L (mm)	Ripple (mA)	D×L (mm)	Ripple (mA)	D×L (mm)	Ripple (mA)	D×L (mm)	Ripple (mA)
0.47		R47											5×11	8
1		010											5×11	12
2.2		2R2											5×11	18
3.3		3R3											5×11	22
4.7		4R7									5×11	25	5×11	29
10		100						5×11	34	5×11	40	5×12	44	
22		220					5×11	51	5×11	55	6×11	68	8×11	75
33		330			5×11	57	5×11	63	6×11	75	6×12	80	8×12	105
47		470	5×11	61	5×11	67	6×11	89	6×12	95	8×11	111	8×14	146
100		101	6×11	104	6×11	115	8×11	139	8×12	155	10×15	196	10×20	264
220		221	8×11	168	8×12	204	8×14	255	10×15	300	10×20	364	12×25	443
330		331	8×12	229	8×14	275	10×15	346	10×20	414	12×25	493		
470		471	8×14	300	10×15	371	10×20	460	12×20	530				