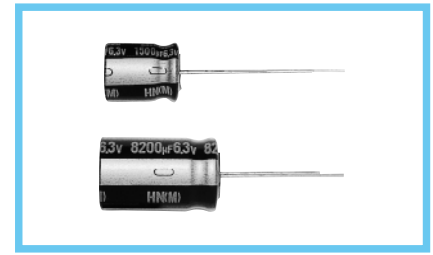


HN series Ultra Low Impedance



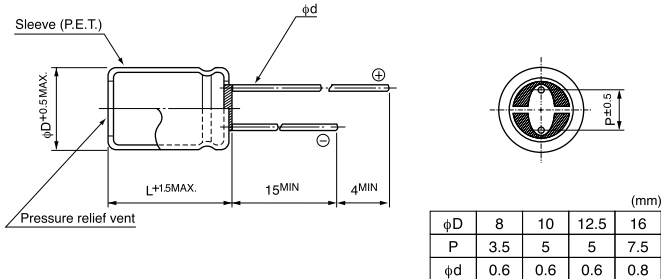
- Lower impedance than HM series.
- Adapted to the RoHS directive (2002/95/EC).



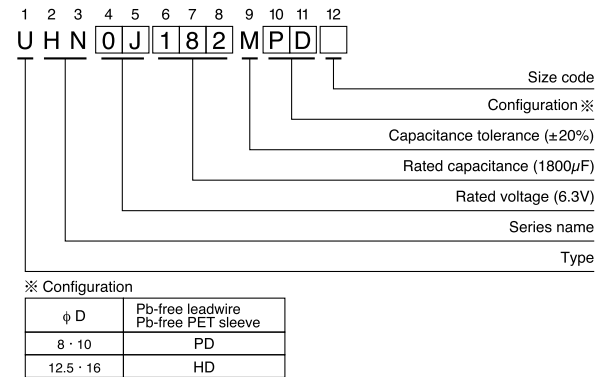
Specifications

Item	Performance Characteristics				
Category Temperature	- 25 ~ +105°C				
Rated Voltage Range	6.3 ~ 16V				
Rated Capacitance Range	330 ~ 8200µF				
Capacitance Tolerance	±20% (120Hz, 20°C)				
Leakage Current	After 2 minutes' application of rated voltage, leakage current is less than 0.03CV				
tan δ	For capacitance of more than 1000µF, add 0.02 for every increase of 1000µF				
	Rated voltage (V)	6.3	10	16	120Hz 20°C
	tan δ (MAX.)	0.22	0.19	0.16	
Stability at Low Temperature	Rated voltage (V)	6.3	10	16	120Hz
	Impedance ratio ZT / Z20 (MAX.) Z-25°C / Z+20°C	3	3	3	
Endurance	After an application of D.C. bias voltage plus the rated ripple current for 2000 hours at 105°C the peak voltage shall not exceed the rated D.C. voltage, capacitors meet the characteristic requirements listed below.				
	Capacitance change	Within ±30% of initial value			
	tan δ	200% or less of initial specified value			
	Leakage current	Initial specified value or less			
Marking	Printed with gold color on black sleeve.				

Radial Lead Type



Type numbering system (Example : 6.3V 1800µF)



• Please refer to page 21 about the end seal configuration.

Standard ratings

Cap. (µF)	Code	6.3 (0J)			10 (1A)			16 (1C)		
		Case size φD × L (mm)	Impedance (mΩ) MAX. 20°C / 100kHz	Rated ripple (mA rms) 105°C / 100kHz	Case size φD × L (mm)	Impedance (mΩ) MAX. 20°C / 100kHz	Rated ripple (mA rms) 105°C / 100kHz	Case size φD × L (mm)	Impedance (mΩ) MAX. 20°C / 100kHz	Rated ripple (mA rms) 105°C / 100kHz
330	331						8 × 11.5	21	1300	
470	471				8 × 11.5	21	1300	8 × 11.5 ▲ 10 × 12.5	21 18	
560	561	8 × 11.5	21	1300						
680	681				8 × 11.5 ▲ 10 × 12.5	21 18	1300 1760	10 × 12.5 ● 8 × 20 ○ 10 × 16	18 12 11	1760 2220 2280
820	821	8 × 11.5 8 × 15	21 20	1300 1700	10 × 12.5 10 × 12.5	18 18	1760 1760	10 × 16 10 × 16	11 11	2280 2280
1000	102	▲ 10 × 12.5	18	1760	● 10 × 16 ○ 8 × 20	11 12	2280 2220	▲ 8 × 20 ● 10 × 20	12 10	2220 2900
1200	122	8 × 15	20	1700	10 × 16	11	2280	10 × 20	10	2900
1500	152	10 × 12.5 ▲ 8 × 20 ● 10 × 16	18 12 11	1760 2220 2280	10 × 16 ▲ 8 × 20	11 12	2280 2220	10 × 20	10	2900
1800	182	10 × 16 ▲ 8 × 20	11 12	2280 2220	10 × 20	10	2900	10 × 25 ▲ 12.5 × 20	9 9	3190 3190
2200	222	● 10 × 16 10 × 20	11 10	2280 2900	10 × 25 ▲ 12.5 × 20	9 9	3190 3190	12.5 × 20 ▲ 12.5 × 25	9 8	3190 3370
2700	272	10 × 20	10	2900	12.5 × 20	9	3190	12.5 × 25	8	3370
3300	332	10 × 25 ▲ 12.5 × 20	9 9	3190 3190	12.5 × 25	8	3370	16 × 25	7	3610
4700	472	12.5 × 20	9	3190	12.5 × 25	8	3370			
5600	562	12.5 × 25	8	3370	16 × 25	7	3610			
8200	822	16 × 25	7	3610						

Please refer to page 21, 22, 23 about the formed or taped product spec.
Please refer to page 3 for the minimum order quantity.

- ▲ : In this case, [6] will be put at 12th digit of type numbering system.
- : In this case, [3] will be put at 12th digit of type numbering system.
- : In this case, [9] will be put at 12th digit of type numbering system.