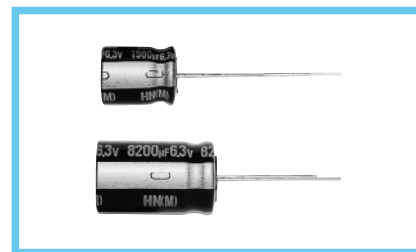


HN series Ultra Low Impedance



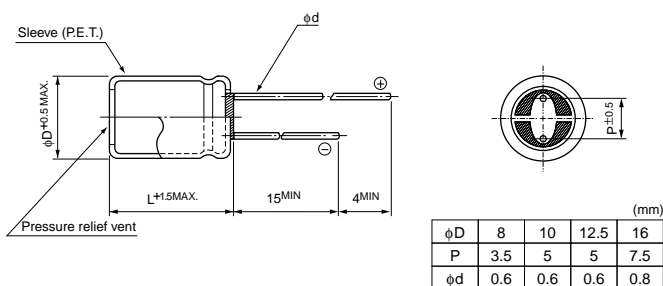
- Lower impedance than HM series.
- Adapted to the RoHS directive (2002/95/EC).



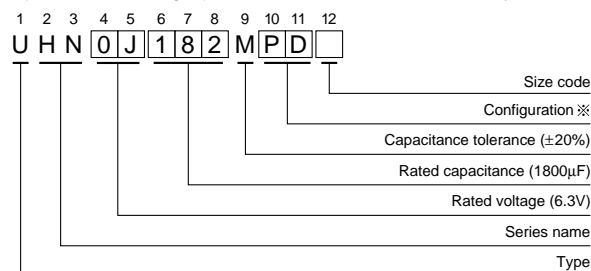
Specifications

Item	Performance Characteristics		
Category Temperature	- 25 to +105°C		
Rated Voltage Range	6.3 to 16V		
Rated Capacitance Range	330 to 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.)	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)



※ Configuration

φ D	Pb-free leadwire Pb-free PET sleeve
8 · 10	PD
12.5 - 16	HD

• Please refer to page 20 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 (mArms) 105°C / 100kHz	Case size φD × L (mm)	Impedance (mΩ) MAX. 20°C / 100kHz	Rated ripple (mArms) 105°C / 100kHz	Case size φD × L (mm)	Impedance (mΩ) MAX. 20°C / 100kHz	Rated ripple (mArms) 105°C / 100kHz
330	331									
470	471				8 × 11.5	21	1300	8 × 11.5	21	1300
560	561	8 × 11.5	21	1300				▲ 10 × 12.5	18	1760
680	681				8 × 11.5	21	1300	10 × 12.5	18	1760
					▲ 10 × 12.5	18	1760	● 8 × 20	12	2220
820	821	8 × 11.5	21	1300	10 × 12.5	18	1760	○ 10 × 16	11	2280
		8 × 15	20	1700	10 × 12.5	18	1760	10 × 16	11	2280
1000	102	▲ 10 × 12.5	18	1760	● 10 × 16	11	2280	▲ 8 × 20	12	2220
					○ 8 × 20	12	2220	● 10 × 20	10	2900
1200	122	8 × 15	20	1700	10 × 16	11	2280	10 × 20	10	2900
		10 × 12.5	18	1760	10 × 16	11	2280			
1500	152	▲ 8 × 20	12	2220	▲ 8 × 20	12	2220	10 × 20	10	2900
		● 10 × 16	11	2280						
1800	182	10 × 16	11	2280	10 × 20	10	2900	10 × 25	9	3190
		▲ 8 × 20	12	2220				▲ 12.5 × 20	9	3190
2200	222	● 10 × 16	11	2280	10 × 25	9	3190	12.5 × 20	9	3190
		10 × 20	10	2900	▲ 12.5 × 20	9	3190	▲ 12.5 × 25	8	3370
2700	272	10 × 20	10	2900	12.5 × 20	9	3190	12.5 × 25	8	3370
3300	332	10 × 25	9	3190						
		▲ 12.5 × 20	9	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 20, 21, 22 about the formed or taped product spec.
Please refer to page 4 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.