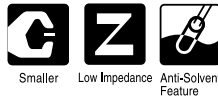
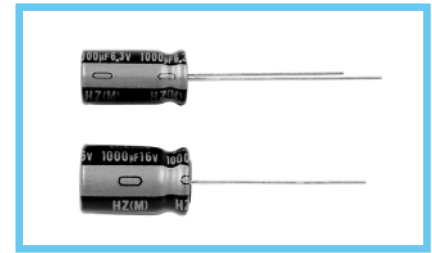


**HZ** Ultra Low Impedance series



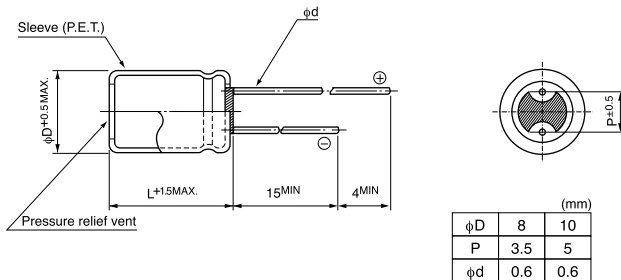
- Lower impedance than HN series.
- Adapted to the RoHS directive (2002/95/EC).



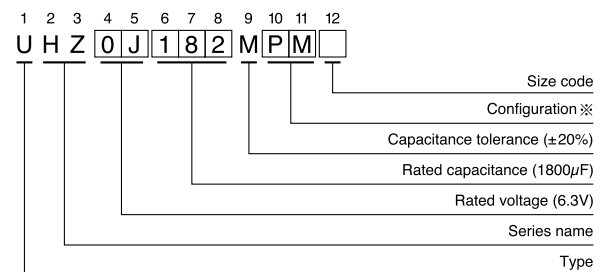
## Specifications

Item	Performance Characteristics				
Category Temperature	-25 ~ +105°C				
Rated Voltage Range	6.3 ~ 16V				
Rated Capacitance Range	470 ~ 3300μF				
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)



### ※ Configuration

φ D	Pb-free leadwire Pb-free PET sleeve
8 · 10	PM

## Standard ratings

Cap. (μF)	V (Code)	Item	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
470	471										
680	681										
820	821										
1000	102		8 × 15	14	2210	10 × 12.5	12	2280	10 × 16	10	2960
		▲	10 × 12.5	12	2280	●	10 × 16	10	2960	▲	8 × 20
1200	122		8 × 15	14	2210	10 × 16	10	2960	10 × 20	7	3770
		▲	10 × 12.5	12	2280	●	8 × 20	9	2880	●	10 × 20
1500	152		8 × 20	9	2880	10 × 16	10	2960	10 × 20	7	3770
		●	10 × 16	10	2960	▲	8 × 20	9	2880		
1800	182		10 × 16	10	2960	10 × 20	7	3770	10 × 25	6.5	4140
		▲	8 × 20	9	2880						
2200	222		10 × 16	10	2960	10 × 20	7	3770			
2700	272		10 × 20	7	3770						
3300	332		10 × 25	6.5	4690						

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.