

UPH

High Voltage, Miniature-sized



Smaller



High Ripple Current



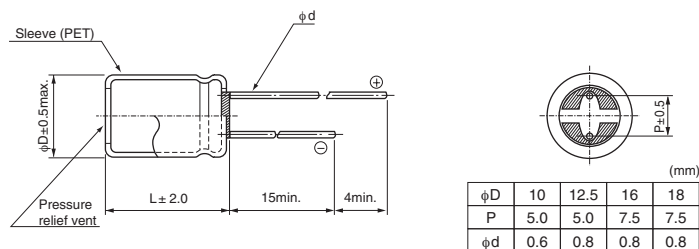
- High ripple current.
- Load life of 2000 hours at 105°C.
- Suited for ballast applications.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

Specifications

Item	Performance Characteristics				
Category Temperature Range	-40 to +105°C				
Rated Voltage Range	400 to 450V				
Rated Capacitance Range	27 to 220μF				
Capacitance Tolerance	± 20% at 120Hz, 20°C				
Leakage Current ※	After 1 minute's application of rated voltage at 20°C, leakage current is not more than 0.04CV+100 (μA).				
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C				
	Rated voltage (V)	400	420	450	
	tan δ (max.)	0.15	0.20	0.20	
Stability at Low Temperature	Measurement frequency : 120Hz				
	Rated voltage (V)	400	420	450	
	Impedance ratio (max.)	Z(-25°C) / Z(+20°C)	8	8	
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after D.C. bias plus rated ripple current is applied for 2000 hours at 105°C, the peak voltage shall not exceed the rated voltage.			Capacitance change	Within ±20% of the initial capacitance value
				tan δ	200% or less than the initial specified value
				Leakage current	Less than or equal to the initial specified value
Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above.				
Marking	Printed with white color letter on dark brown sleeve.				

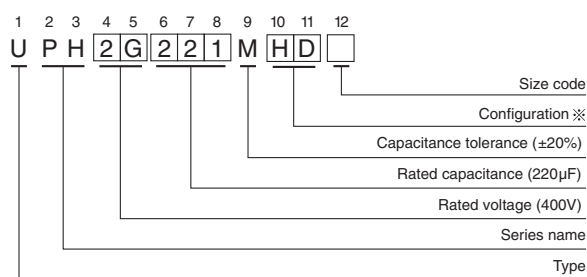
※ I : Leakage Current (µA), C : Rated Capacitance (µF), V : Rated Voltage (V)

Radial Lead Type



- Please refer to the Guidelines for Aluminum Electrolytic Capacitors for end seal configuration information.

Type numbering system (Example : 400V 220µF)



※ Configuration

φ D	Pb-free leadwire Pb-free PET sleeve
10	PD
12.5 to 18	HD

Frequency coefficient of rated ripple current

Frequency	60Hz	120Hz	500Hz	1kHz	10kHz or more
Coefficient	0.80	1.00	1.25	1.40	1.50

• Dimension table in next page.

UPH

■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μ F)	Case Size ϕ D \times L (mm)	$\tan \delta$	Leakage Current (μ A) (at 20°C after 1 minute)	Rated Ripple (mA _{rms}) (105°C/120Hz)	Part Number
400 (2G)	33	10 \times 31.5	0.15	628	330	UPH2G330MPD
	56	12.5 \times 31.5	0.15	996	470	UPH2G560MHD
	68	12.5 \times 35.5	0.15	1188	540	UPH2G680MHD
	82	12.5 \times 40	0.15	1412	620	UPH2G820MHD
	100	16 \times 31.5	0.15	1700	710	UPH2G101MHD
	120	16 \times 35.5	0.15	2020	800	UPH2G121MHD
	150	16 \times 40	0.15	2500	920	UPH2G151MHD
	150	18 \times 31.5	0.15	2500	890	UPH2G151MHD6
	180	18 \times 40	0.15	2980	1060	UPH2G181MHD
	220	18 \times 46	0.15	3620	1200	UPH2G221MHD
420 (W6)	33	10 \times 31.5	0.20	654.4	320	UPHW6330MPD
	56	12.5 \times 31.5	0.20	1040.8	460	UPHW6560MHD
	100	16 \times 31.5	0.20	1780	690	UPHW6101MHD
	120	16 \times 35.5	0.20	2116	780	UPHW6121MHD
	120	18 \times 31.5	0.20	2116	800	UPHW6121MHD6
	150	18 \times 35.5	0.20	2620	920	UPHW6151MHD
	180	18 \times 40	0.20	3124	1040	UPHW6181MHD
450 (2W)	27	10 \times 31.5	0.20	586	300	UPH2W270MPD
	47	12.5 \times 31.5	0.20	946	430	UPH2W470MHD
	56	12.5 \times 35.5	0.20	1108	490	UPH2W560MHD
	68	12.5 \times 40	0.20	1324	560	UPH2W680MHD
	82	16 \times 31.5	0.20	1576	640	UPH2W820MHD
	100	16 \times 35.5	0.20	1900	730	UPH2W101MHD
	120	16 \times 40	0.20	2260	820	UPH2W121MHD
	120	18 \times 31.5	0.20	2260	800	UPH2W121MHD6
	150	18 \times 40	0.20	2800	970	UPH2W151MHD
	180	18 \times 46	0.20	3340	1090	UPH2W181MHD

For cut leads, formed leads or taped parts, please add the appropriate code after the size code (12th digit).
If there is no size code in the part number, please add size code "1" and then add the appropriate code.

- For formed lead or taped product specifications and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.