



HKP NON-POLARIZED WIDE TEMPERATURE ELECTROLYTIC CAPACITOR

Non-polarized with wide temperature range -55°C~+105°C

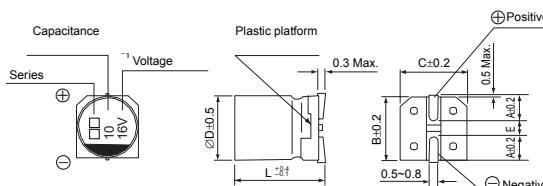
Load life of 1000 hours

RoHS & REACH compliant, Halogen-free

SPECIFICATIONS

Items	Characteristics								
Operation Temperature Range	-55 ~ +105°C								
Voltage Range	6.3 ~ 50V								
Capacitance Range	0.1 ~ 47μF								
Capacitance Tolerance	±20% at 120Hz, 20°C								
Leakage Current	Leakage current ≤ 0.05CV or 10μA, whichever is greater (after 2 minutes application of rated voltage at 20°C) C: Nominal capacitance (μF) , V: Rated voltage (V)								
Dissipation Factor (tan δ)	Measurement frequency : 120Hz, Temperature : 20°C								
	Rated Voltage (V)	6.3	10	16, 25	35, 50				
	tan δ (max.)	0.24	0.20	0.17	0.15				
Stability at Low Temperature	Measurement frequency : 120Hz								
	Rated Voltage (V)	6.3	10	16, 25	35, 50				
	Impedance Ratio Z(-25°C) / Z(20°C)	4	3	2	2				
	ZT/Z20 (max.) Z(-55°C) / Z(20°C)	8	6	4	3				
Load Life	After 1000 hours application of the rated voltage at 105°C (the polarity needs to exchange every 250 hours), they meet the characteristics listed below.								
	Capacitance Change	Within ±20% of initial value							
	Dissipation Factor	200% or less of initial specified value							
	Leakage Current	initial specified value or less							
Shelf Life	After leaving capacitors under no load at 105°C for 1000 hours, they meet the specified value for load life characteristics listed above.								
Resistance to Soldering Heat	After reflow soldering and restored at room temperature, they meet the characteristics listed below.								
	Capacitance Change	Within ±10% of initial value							
	Dissipation Factor	initial specified value or less							
	Leakage Current	initial specified value or less							
Marking	Black print on the case top.								

DRAWING (Unit: mm)



*1. Voltage mark for 6.3V is [6V]

6.3V

DIMENSIONS (Unit: mm)

ØD x L	4 x 5.4	5 x 5.4	6.3 x 5.4
A	2.0	2.2	2.6
B	4.3	5.3	6.6
C	4.3	5.3	6.6
E ± 0.2	1.0	1.4	1.9
L	5.4	5.4	5.4



DIMENSIONS & MAXIMUM PER MISSIBLE RIPPLE CURRENT

WV μF	Code	6.3		10		16		25		35		50	
		Case size	Ripple current										
0.1	104											4 × 5.4	1.0
0.22	224											4 × 5.4	2.0
0.33	334											4 × 5.4	2.8
0.47	474											4 × 5.4	4.0
1	105											4 × 5.4	8.4
2.2	225									4 × 5.4	8.4	5 × 5.4	13
3.3	335							5 × 5.4	12	5 × 5.4	16	5 × 5.4	17
4.7	475					4 × 5.4	12	5 × 5.4	16	5 × 5.4	18	6.3 × 5.4	20
10	106			4 × 5.4	17	5 × 5.4	23	6.3 × 5.4	27	6.3 × 5.4	29		
22	226	5 × 5.4	28	6.3 × 5.4	33	6.3 × 5.4	37						
33	336	6.3 × 5.4	37	6.3 × 5.4	41	6.3 × 5.4	49						
47	476	6.3 × 5.4	45										

• Case size ØD×L(mm), ripple current (mA rms) at 105°C, 120Hz

FREQUENCY COEFFICIENT OF ALLOWABLE RIPPLE CURRENT

Frequency	50Hz	120Hz	300Hz	1KHz	10KHz~
Coefficient	0.70	1.00	1.17	1.36	1.50

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5~10°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.

◆ How to order

HKP	106	M	0035	0405	R	-	Additional characters may be added for special requirements
Type	Capacitance code	Tolerance	Rated Voltage	Size Code	Package		
HKP	pF Code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow) 106 = 10uF 107 = 100uF	M: +/-20%	Code 0035: 35VDC For DC Voltage 0006: 6.3VDC 0035: 35VDC 0050: 50VDC	Code 0405: Size 4x5.4mm Size for V-chip E-cap 0405: Size 4x5.4mm 0505: Size 5x5.4mm 0605: Size 6.3x5.4mm	R: Tape & Reel		

Note: Specification is subject to change without further notice. For more details and updates, please visit our website.