

HP series

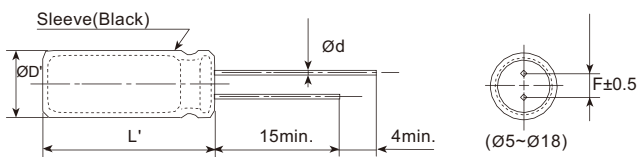
- Standard bi-polarized series
- Endurance: 1,000 hours at 105°C
- Compliant to AEC-Q200
- RoHS Compliant



SPECIFICATIONS

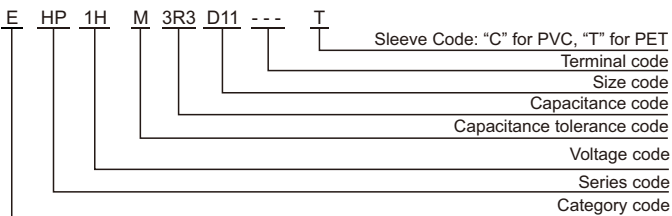
Items	Characteristics									
Category Temperature Range	-40~+105°C									
Rated Voltage Range	6.3~100 V _{dc}									
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)									
Leakage Current	I ≤ 0.06CV or 10μA, whichever is greater. (at 20°C after 2 minutes) I ≤ 0.03CV or 3μA, whichever is greater. (at 20°C after 5 minutes) Where, I: Max. leakage current (μA), C: Nominal capacitance (μF), V: Rated voltage (V)									
Dissipation Factor (tanδ)	Rated Voltage(V _{dc})	6.3	10	16	25	35	50	63	80	100
	Dissipation Factor (max.)	0.24	0.24	0.20	0.20	0.16	0.14	0.12	0.12	0.10
When nominal capacitance exceeds 1,000μF, add 0.02 to the value above for each 1,000μF increase. (at 20°C, 120Hz)										
Low Temperature Characteristics (Max. Impedance Ratio)	Rated Voltage(V _{dc})	6.3	10	16	25	35	50	63	80	100
	Z(-25°C)/Z(+20°C)	4	3					2		
	Z(-40°C)/Z(+20°C)	10	8	6	4					3
(at 120Hz)										
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 1,000 hours at 105°C with the polarity inverted every 250 hours.									
	Capacitance Change	≤±20% of the initial value								
	Dissipation Factor	≤150% of the initial specified value								
	Leakage Current	≤The initial specified value								
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 500 hours at 105°C without voltage applied.									
	Capacitance Change	≤±20% of the initial value								
	Dissipation Factor	≤150% of the initial specified value								
	Leakage Current	≤200% of the initial specified value								

DIMENSIONS[mm]



ØD	5	6.3	8	10	12.5	16	18
Ød	0.5	0.5	0.5	0.6	0.6	0.8	0.8
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
ØD'	ØD+0.5max.						
L'	L+2max.						

PART NUMBERING SYSTEM



HP series

■ STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Size ΦDxL(mm)	Rated ripple current (mA _{rms} /105°C, 120Hz)	Part Number
6.3	33	5×11	45	EHP0JM330D11---T
	47	5×11	54	EHP0JM470D11---T
	100	6.3×11	90	EHP0JM101E11---T
	220	8×11	150	EHP0JM221F11---T
	330	8×11	185	EHP0JM331F11---T
	470	10×13	260	EHP0JM471G13---T
	1000	10×20	460	EHP0JM102G20---T
	2200	12.5×25	820	EHP0JM222W25---T
	3300	16×25	1110	EHP0JM332L25---T
	4700	16×30	1430	EHP0JM472L30---T
6800	18×35	1830	EHP0JM682M35---T	
10	22	5×11	37	EHP1AM220D11---T
	33	5×11	45	EHP1AM330D11---T
	47	5×11	54	EHP1AM470D11---T
	100	6.3×11	90	EHP1AM101E11---T
	220	8×11	150	EHP1AM221F11---T
	330	10×16	240	EHP1AM331G16---T
	470	10×16	290	EHP1AM471G16---T
	1000	12.5×20	510	EHP1AM102W20---T
	2200	16×25	910	EHP1AM222L25---T
	3300	16×30	1200	EHP1AM332L30---T
4700	18×35	1520	EHP1AM472M35---T	
16	10	5×11	27	EHP1CM100D11---T
	22	5×11	40	EHP1CM220D11---T
	33	5×11	49	EHP1CM330D11---T
	47	6.3×11	67	EHP1CM470E11---T
	100	8×11	110	EHP1CM101F11---T
	220	10×13	195	EHP1CM221G13---T
	330	10×16	265	EHP1CM331G16---T
	470	10×20	345	EHP1CM471G20---T
	1000	12.5×25	605	EHP1CM102W25---T
	2200	16×30	1070	EHP1CM222L30---T
3300	18×35	1400	EHP1CM332M35---T	
25	10	5×11	27	EHP1EM100D11---T
	22	5×11	46	EHP1EM220D11---T
	33	6.3×11	56	EHP1EM330E11---T
	47	6.3×11	67	EHP1EM470E11---T
	100	8×11	110	EHP1EM101F11---T
	220	10×16	215	EHP1EM221G16---T
	330	12.5×20	320	EHP1EM331W20---T
	470	12.5×20	380	EHP1EM471W20---T
	1000	16×25	670	EHP1EM102L25---T
	2200	18×35	1140	EHP1EM222M35---T
35	10	5×11	30	EHP1VM100D11---T
	22	6.3×11	51	EHP1VM220E11---T
	33	8×11	72	EHP1VM330F11---T
	47	8×11	86	EHP1VM470F11---T
	100	10×16	160	EHP1VM101G16---T

WV (V _{dc})	Cap (μF)	Size ΦDxL(mm)	Rated ripple current (mA _{rms} /105°C, 120Hz)	Part Number
35	220	12.5×20	290	EHP1VM221W20---T
	330	12.5×20	350	EHP1VM331W20---T
	470	12.5×25	465	EHP1VM471W25---T
	1000	16×30	805	EHP1VM102L30---T
50	0.47	5×11	7	EHP1HMR47D11---T
	1	5×11	10	EHP1HM010D11---T
	2.2	5×11	15	EHP1HM2R2D11---T
	3.3	5×11	18	EHP1HM3R3D11---T
	4.7	5×11	22	EHP1HM4R7D11---T
	10	6.3×11	37	EHP1HM100E11---T
	22	8×11	63	EHP1HM220F11---T
	33	8×11	77	EHP1HM330F11---T
	47	10×13	105	EHP1HM470G13---T
	100	10×20	190	EHP1HM101G20---T
220	12.5×25	340	EHP1HM221W25---T	
330	16×25	460	EHP1HM331L25---T	
470	16×30	590	EHP1HM471L30---T	
63	3.3	5×11	20	EHP1JM3R3D11---T
	4.7	6.3×11	24	EHP1JM4R7E11---T
	10	6.3×11	40	EHP1JM100E11---T
	22	8×11	68	EHP1JM220F11---T
	33	10×13	98	EHP1JM330G13---T
	47	10×16	130	EHP1JM470G16---T
	100	12.5×20	225	EHP1JM101W20---T
	220	16×25	405	EHP1JM221L25---T
	330	16×30	535	EHP1JM331L30---T
	470	18×35	680	EHP1JM471M35---T
80	2.2	5×11	16	EHP1BM2R2D11---T
	3.3	6.3×11	23	EHP1BM3R3E11---T
	4.7	6.3×11	27	EHP1BM4R7E11---T
	10	8×11	46	EHP1BM100F11---T
	22	10×16	89	EHP1BM220G16---T
	33	10×16	105	EHP1BM330G16---T
	47	10×20	140	EHP1BM470G20---T
	100	12.5×25	245	EHP1BM101W25---T
	220	16×30	435	EHP1BM221L30---T
	330	18×35	570	EHP1BM331M35---T
100	0.47	5×11	8	EHP1KMR47D11---T
	1	5×11	12	EHP1KM010D11---T
	2.2	6.3×11	20	EHP1KM2R2E11---T
	3.3	6.3×11	25	EHP1KM3R3E11---T
	4.7	6.3×11	30	EHP1KM4R7E11---T
	10	8×11	50	EHP1KM100F11---T
	22	10×16	97	EHP1KM220G16---T
	33	12.5×20	140	EHP1KM330W20---T
	47	12.5×20	170	EHP1KM470W20---T
	100	16×25	300	EHP1KM101L25---T
220	18×35	510	EHP1KM221M35---T	

※ Specifications subject to change without notice.