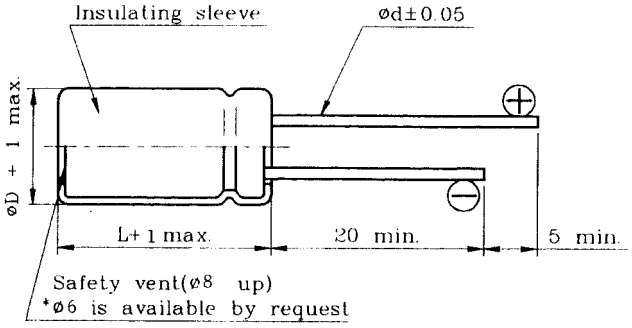
HITANO
ENTERPRISE CORP. ®

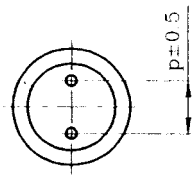
EXR SERIES

- EXR series capacitors are ideal for use in switching power supplies.
- Other High Frequency Applications.
- **Low Impedance** and long life.

Characteristics

Voltage Range	6.3 ~ 100V								
Capacitance Range	4.7 ~3300uF								
Temperature Range	-55 ~ + 105℃								
Leakage Current	I=0.01CV or 3uA, whichever is greater (After 2 minutes) I=0.03CV or 4uA, whichever is greater (After 1 minutes)								
Capacitance Tolerance	±20% at 120Hz , 20℃								
Dissipation Factor	WV	6.3	10	16	25	35	50	63	100
	tan δ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08
	For capacitance > 1000uF, add 0.02 for every 1000uF.(at 20℃, 120Hz)								
Low temperature Characteristics	Impedance ration at 120Hz								
	Rated Voltage (V)	6.3~10		16~35		50~100			
	Z-25℃/Z 20℃	4		3		2			
Load life after application of the rated voltage for 2000 hrs at 105℃	Leakage current	Less than specified value							
	Capacitance change	Within ±20% of initial value							
	tan δ	Less than 200% of specified value							
Shelf life (at 105℃)	After 1000 hrs no load test, leakage current, capacitance and tan δ are same as load life value.								





Drawing

Dϕ	5	6.3	8	10	13	16	18
p	2.0	2.5	3.5	5.0	5.0	7.5	7.5
dϕ	0.5	0.5	0.5	0.6	0.6	0.8	0.8

Ripple Current Coefficients

Frequency (Hz)	60	120	400	1K	10K	100K
W.V.	Multiplier					
10~16V	0.45	0.60	0.83	0.94	0.98	1.00
25~35V	0.38	0.50	0.75	0.90	0.97	1.00
50~100V	0.36	0.46	0.70	0.88	0.94	1.00

Temperature(℃)	65	75	85	95	105
Multiplier	2.12	1.92	1.69	1.50	1.00

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Dimensions, Maximum Permissible Ripple Current & Impedance

WV / Item / uF	6.3			10			16			25		
	DϕxL(mm)	Impedance (Ω)max 20℃ 100KHZ	Ripple Current mA(rms) 105℃ 100KHz	DϕxL(mm)	Impedance (Ω)max 20℃ 100KHZ	Ripple Current mA (rms) 105℃ 100KHz	DϕxL(mm)	Impedance (Ω)max 20℃ 100KHZ	Ripple Current mA(rms) 105℃ 100KHz	DϕxL(mm)	Impedance (Ω)max 20℃ 100KHZ	Ripple Current mA(rms) 105℃ 100KHz
100							6.3x11	0.65	180	6.3x11	0.25	295
220	6.3x11	0.65	180	6.3X11	0.25	295	8x12	0.25	295	8x12	0.15	555
330	8x12	0.25	295	8x12	0.25	295	8x12	0.15	555	8x14	0.15	555
470	8x12	0.25	295	8x12	0.15	555	10x12.5	0.12	587	10x16	0.09	760
680	8x14	0.17	428	8x14	0.10	805	10x16	0.08	850	10x21	0.062	1102
1000	8x14	0.10	555	10x12.5	0.08	760	10x21	0.068	1050	13x21	0.052	1220
1500	10x16	0.08	801	10x21	0.07	1000	13x21	0.045	1575	13x26	0.035	1830
2200	10x21	0.068	1050	10x21	0.052	1220	13x21	0.039	1660	16x26	0.030	1950
3300	10x21	0.052	1220	13x21	0.039	1660	16x26	0.03	1950	16x31	0.022	2150
4700	13x21	0.039	1660	13x26	0.03	1950	16x31	0.022	2150	16x36	0.018	2400
6800	16x26	0.03	1950	16x26	0.022	2150	16x36	0.018	2400	18X41	0.015	3550
10000	16x31	0.022	2150	16x31	0.018	2400	18x36	0.015	2800			

WV / Item / uF	35			50			63			100		
	DϕxL(mm)	Impedance (Ω)max 20℃ 100KHZ	Ripple Current mA(rms) 105℃ 100KHz	DϕXl(mm)	Impedance (Ω)max 20℃ 100KHZ	Ripple Current mA(rms) 105℃ 100KHz	DϕxL(mm)	Impedance (Ω)max 20℃ 100KHZ	Ripple Current mA(rms) 105℃ 100KHz	DϕxL(mm)	Impedance (Ω)max 20℃ 100KHZ	Ripple Current mA(rms) 105℃ 100KHz
4.7				5x11	2.50	90	5x11	2.50	90	5x11	2.40	80
10				5x11	2.00	110	5x11	2.0	110	6.3x11	1.80	117
22				6.3x11	1.35	140	6.3x11	0.98	173	8x12	0.68	206
33	5x11	1.30	180	6.3x11	0.80	140	6.3x11	0.71	213	10x16	0.48	293
47	6.3x11	0.80	180	6.3x11	0.74	220	8x12	0.65	300	10x16	0.37	382
68	6.3x11	0.45	260	8x12	0.51	319	10x12.5	0.45	419	10x21	0.28	501
100	8x12	0.25	295	10x12	0.35	469	10x16	0.31	558	13x21	0.18	714
220	10x16	0.114	555	10x21	0.21	796	13x21	0.20	977	16x26	0.10	1282
330	10x16	0.08	760	10x21	0.19	1055	13x21	0.12	1298	16x31	0.09	1563
470	10x21	0.065	1050	13x21	0.10	1365	13x26	0.081	1688	18x32	0.076	1907
680	13x21	0.047	1522	13x26	0.077	1790	16x26	0.065	2252	18x36	0.062	2387
1000	13x26	0.039	1660	16x26	0.053	2408	16x31	0.049	2988	18x41	0.076	3100
1500	16x26	0.026	2490	16x31	0.045	2920	18x36	0.04	3100			
2200	16x31	0.022	2150	18x36	0.037	3320	18x41	0.024	3600			
3300	16x36	0.016	2650	18x41	0.03	3100						
4700	18X41	0.01	3000									