

HGN series

HGN

- Enabled high ripple current.
lower impedance at high frequency range.
- Long life 10,000hours, 105°C
- 耐高紋波電流，高頻超低阻抗。
- 長壽命品10,000小時，105°C



SPECIFICATIONS

Items 項目	Characteristics 特 性										
Capacitance Tolerance 靜電容量誤差	±20% (120Hz, 20℃)										
Operating temperature Range 適用溫度範圍	-40 ~ +105℃										
Rated Voltage Range 工作電壓範圍	6.3 ~100V										
Leakage Current 洩漏電流	I ≤0.01 CV or 3 (uA) (After 2 minutes application of DC working voltage, at 20℃)										
Dissipation Factor 散逸因素 (tan δ)	Measurement Frequency: 120Hz. Temperature: 20℃										
	Rated Voltage (V)	6.3	10	16	25	35	50	63	100		
	tan δ (MAX)	0.24	0.20	0.16	0.15	0.12	0.10	0.09	0.08		
	When nominal capacitance exceeds 1000uF, add 0.02 to the value above for each 1000uF increase. (20℃、120Hz)										
Low Temperature Stability 低溫特性 Impedance Ratio (MAX) 阻抗比率 (最大值)	Measurement Frequency: 120Hz.										
	Rated Voltage (V)	6.3	10	16	25	35	50	63	100		
	Z (-25℃) / Z (20℃)	4	3	2	2	2	2	2	2		
	Z (-40℃) /Z (20℃)	8	6	4	3	3	3	3	3		
Load Life 負荷壽命	Size			ΦD≤6.3			ΦD=8,10		ΦD≥13		
	Voltage	6.3~10WV			4000 hours			6000 hours		8000 hours	
		16~100WV			5000 hours			7000 hours		10000 hours	
	Capacitance Change		Within ± 25% of Initial Value								
	tan δ		200% or less of Initial Specified Value								
	Leakage Current		Initial Specified Value or less								
	Shelf Life 放置壽命	1000hours, no voltage applied, at 105℃. After Test: U _R to be applied for 30 minutes, 24 to 48 hours before measurement.									
Capacitance Change		Within ± 25% of Initial Value									
tan δ		200% or less of Initial Specified Value									
Leakage Current		Initial Specified Value or less									
Standards 參照標準	JIS C 5141 and JIS C 5102										

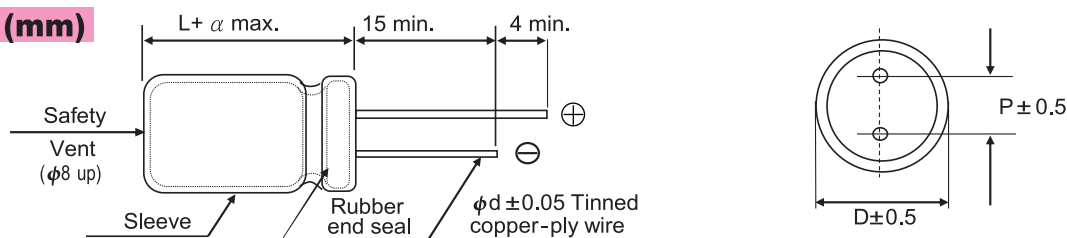
PERMISSIBLE RIPPLE CURRENT

Frequency Coefficient

Capacitance (μ F)	Frequency (Hz)				
	50	120	300	1K	100K
≤33	0.50	0.55	0.70	0.90	1.00
47~1000	0.60	0.70	0.85	0.95	1.00
470~1000	0.65	0.75	0.90	0.98	1.00
1200~18000	0.70	0.80	0.95	1.00	1.00

HGN series

DIMENSIONS (mm)



ΦD	5	6.3	8	10	13	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
Φd	0.5	0.5	0.5	0.6	0.6	0.8	0.8

α	(L<16)1.0 (L≥16)2.0
---	------------------------

STANDARD RATINGS

D×L(mm); R.C.: (mA rms) at 105°C, 100KHz; IMP:(Ω max) at 20°C, -10°C100KHz.

Cap (μF)	WV(V) (Code)	6.3 (0J)				10 (1A)			
	Item	D×L	IMP		R.C.	D×L	IMP		R.C.
			20°C	-10°C			20°C	-10°C	
100						5×11	1.740	6.900	215
150		5×11	1.710	6.900	210	5×11	1.740	6.900	230
220		6.3×11	0.750	2.700	320	6.3×11	0.660	2.610	340
330		6.3×11	0.630	2.610	340	6.3×11	0.660	2.610	380
470		8×12	0.450	1.740	345	8×12	0.390	1.560	640
680	8×12	0.390	1.560	645		8×16	0.258	1.050	845
						10×13	0.240	0.930	865
820		10×13	0.240	0.960	865	10×16	0.210	0.840	1015
1000	8×16	0.255	1.050	870		8×20	0.204	0.810	1050
						10×16	0.180	0.720	1215
1200		8×20	0.213	0.780	1050	10×20	0.135	0.540	1410
		10×16	0.186	0.720	1215				
1500		10×20	0.135	0.540	1410	10×25	0.123	0.510	1610
1800						13×21	0.117	0.450	1710
2200	10×25	0.126	0.510	1650		10×30	0.090	0.360	1920
						13×21	0.105	0.360	1910
2700		10×30	0.090	0.360	1900				
3300		13×21	0.102	0.360	1900	13×25	0.078	0.267	2230
3900		13×25	0.078	0.264	2240	13×30	0.069	0.234	2660
4700		13×30	0.069	0.234	2650	13×35	0.060	0.195	2890
5600	13×35	0.060	0.195	2890		13×40	0.048	0.165	3360
						16×26	0.060	0.180	2940
6800	13×40	0.048	0.165	3350		16×32	0.048	0.150	3460
						18×25	0.054	0.147	3150
8200	16×32	0.048	0.150	3450		16×36	0.045	0.132	3610
						18×32	0.045	0.120	4180
10000	16×36	0.042	0.132	3620		16×40	0.039	0.114	4090
						18×35	0.036	0.114	4150
12000	16×40	0.036	0.114	4090		18×40	0.033	0.096	4290
15000		18×35	0.039	0.114	4230				
18000		18×40	0.036	0.096	4290				

※ 13mm may be replaced by 12.5mm upon customer's request.

HGN series

HGN

STANDARD RATINGS

D×L(mm); R.C.: (mA rms) at 105°C,100KHz; IMP: (Ω max) at 20 °C, -10°C, 100KHz.

Cap (μ F)	WV(V) (Code)	16 (1C)				25 (1E)			
		D×L	IMP		R.C.	D×L	IMP		R.C.
			20°C	-10°C			20°C	-10°C	
47						5×11	1.710	6.900	200
56		5×11	1.710	6.900	220	5×11	1.710	6.900	240
100		6.3×11	0.630	2.460	310	6.3×11	0.630	2.610	340
120		6.3×11	0.630	2.610	340				
220		8×12	0.570	2.550	510	8×12	0.360	1.560	650
330		8×12	0.360	1.560	650	8×16	0.261	1.050	850
						10×13	0.243	0.960	870
470		8×16	0.258	1.050	840	8×20	0.210	0.810	1050
		10×13	0.240	0.960	865	10×16	0.180	0.720	1210
680		8×20	0.207	0.810	1060	10×20	0.135	0.540	1410
		10×16	0.180	0.720	1210				
820		10×20	0.156	0.660	1310	10×25	0.123	0.510	1660
1000		10×20	0.135	0.540	1410	10×30	0.090	0.360	1920
						13×21	0.102	0.360	1910
1200		10×25	0.129	0.510	1650				
1500		10×30	0.090	0.360	1920	13×25	0.078	0.267	2240
		13×21	0.105	0.360	1910				
1800		13×25	0.084	0.285	2140	13×30	0.072	0.234	2660
2200		13×25	0.078	0.267	2240	13×35	0.060	0.195	2890
2700		13×30	0.069	0.231	2650	13×40	0.048	0.168	3360
						16×26	0.063	0.180	2940
3300		13×35	0.060	0.198	2890	16×32	0.048	0.150	3460
						18×25	0.054	0.144	3150
3900		13×40	0.048	0.168	3350	18×25	0.042	0.129	3620
		16×26	0.063	0.180	2930	18×32	0.045	0.120	4180
4700		16×32	0.048	0.150	3450	16×40	0.036	0.114	4090
		18×25	0.054	0.147	3150	18×35	0.039	0.114	4230
5600		16×35	0.045	0.132	3620	18×35	0.033	0.096	4290
		18×32	0.045	0.120	4180				
6800		16×40	0.036	0.114	4080				
8200		18×35	0.042	0.114	4230				
10000		18×40	0.033	0.096	4290				

※ 13mm may be replaced by 12.5mm upon customer's request.

HGN series

STANDARD RATINGS D×L(mm); R.C.: (mA rms) at 105 °C, 100KHz; IMP: (Ω max) at 20°C, -10°C, 100KHz.

Cap (μF)	WV(V) (Code)	35 (1V)				50 (1H)			
	Item	D×L	IMP		R.C	D×L	IMP		R.C.
			20°C	-10°C			20°C	-10°C	
22						5×11	2.100	8.400	180
33		5×11	1.680	6.900	220				
47		6.3×11	1.050	4.200	280	6.3×11	1.140	4.500	220
56		6.3×11	0.630	2.580	340	6.3×11	0.900	3.600	300
100		8×12	0.450	1.680	510	8×12	0.480	2.010	560
120						8×16	0.360	1.440	740
150		8×12	0.390	1.560	650	10×13	0.360	1.440	770
180						8×20	0.270	1.080	920
220		8×16	0.258	1.050	850	10×16	0.249	1.020	1050
		10×13	0.240	0.960	865				
270		8×20	0.210	0.780	1060	10×20	0.180	0.720	1230
330		10×16	0.180	0.720	1210	10×25	0.159	0.660	1450
470		10×20	0.135	0.540	1410	10×30	0.129	0.510	1695
						13×21	0.132	0.450	1670
560		10×25	0.123	0.480	1650	13×25	0.099	0.330	1950
680		10×30	0.090	0.360	1920	13×30	0.090	0.300	2320
		13×21	0.099	0.396	1910				
820						13×35	0.069	0.243	2520
1000		13×25	0.084	0.264	2230	13×40	0.060	0.207	2930
						16×26	0.075	0.225	2555
1200		13×30	0.069	0.234	2660	16×32	0.063	0.198	3020
						18×25	0.075	0.210	2750
1500		13×35	0.060	0.195	2880	16×36	0.054	0.168	3150
1800		13×40	0.048	0.168	3350	16×40	0.048	0.144	3720
		16×26	0.060	0.180	2940	18×32	0.063	0.171	3640
2200		16×32	0.048	0.150	3500	18×35	0.051	0.138	3960
		18×25	0.057	0.147	3140				
2700		16×36	0.045	0.132	3620	18×40	0.042	0.114	3810
		18×32	0.042	0.120	4180				
3300		16×40	0.039	0.114	4090				
		18×35	0.042	0.114	4230				
3900		18×40	0.036	0.099	4290				

※ 13mm may be replaced by 12.5mm upon customer's request.

HGN

HGN series

STANDARD RATINGS

D×L(mm); R.C.: (mA rms) at 105°C, 100KHz; IMP: (Ω max) at 20°C, -10°C, 100KHz.

Cap (uF)	WV(V) (Code)	63 (1J)				100 (2A)			
		D×L	IMP		R.C.	D×L	IMP		R.C.
			20°C	-10°C			20°C	-10°C	
6.8						5×11	6.600	27.60	56
15		5×11	6.600	27.60	56	6.3×11	3.600	15.00	120
27						8×12	1.860	8.400	235
33		6.3×11	3.600	15.00	120				
39						8×16	1.350	6.300	310
47		8×12	2.040	9.300	190	10×13	1.290	5.400	290
56		8×12	1.860	8.400	235	8×20	0.960	4.800	365
68						10×16	0.900	4.500	358
82		8×16	1.350	6.300	310	10×20	0.630	2.820	470
		10×13	1.290	5.400	300				
100		10×16	1.050	5.400	320	10×25	0.600	2.520	536
120		8×20	0.990	4.800	362	10×30	0.450	2.130	666
		10×16	0.900	4.500	357	13×21	0.480	1.920	690
150									
180		10×20	0.600	2.820	470	13×25	0.360	1.350	790
220		10×25	0.600	2.520	531	13×30	0.300	1.260	905
270		10×30	0.450	2.100	663	13×35	0.246	1.050	1060
		13×21	0.480	1.920	690	16×26	0.216	0.810	1250
330		13×25	0.360	1.350	790	13×40	0.210	0.900	1190
390						16×32	0.159	0.600	1570
						18×25	0.168	0.630	1490
470		13×30	0.300	1.260	910	16×36	0.135	0.510	1790
						18×32	0.141	0.510	1640
560		13×35	0.246	1.050	1050	16×40	0.120	0.450	2030
		16×26	0.219	0.810	1250				
680		13×40	0.210	0.900	1190	18×35	0.120	0.450	1790
820		16×32	0.159	0.600	1580	18×40	0.108	0.390	2340
		18×25	0.171	0.630	1490				
1000		16×36	0.135	0.510	1790				
		18×32	0.141	0.510	1640				
1200		16×40	0.117	0.450	2020				
		18×35	0.120	0.450	1790				
1500		18×40	0.105	0.390	2340				

※ 13mm may be replaced by 12.5mm upon customer's request.