

HGX SERIES
Load Life: 125°C 3000 hours, 135°C 3000 hours
◆FEATURES

- Miniaturized, High Capacitance, High Ripple Current, Low ESR, High Reliability.
- Suitable for DC Link of low voltage inverter.
- RoHS compliance.


◆SPECIFICATIONS

Items	Characteristics															
Category Temperature Range	−40~+135℃ (150℃)															
Rated Voltage Range	25, 35Vdc															
Capacitance Tolerance	±20% (20℃, 120Hz)															
Leakage Current(MAX)	I=0.03CV or 4μA whichever is greater. (After 1 minutes) I=Leakage Current(μA) C=Capacitance(μF) V=Rated Voltage(Vdc)															
(tanδ) Dissipation Factor(MAX)	<table><tr><td>Rated Voltage (Vdc)</td><td>25</td><td>35</td></tr><tr><td>tanδ</td><td>0.14</td><td>0.12</td></tr></table> (20℃, 120Hz) When capacitance is over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.				Rated Voltage (Vdc)	25	35	tanδ	0.14	0.12						
Rated Voltage (Vdc)	25	35														
tanδ	0.14	0.12														
Endurance	After applying rated voltage with rated ripple current for specified time at each temperature, the capacitors shall meet the following requirements. <table><tr><td>Capacitance Change</td><td>Within ±30% of the initial value.</td></tr><tr><td>Dissipation Factor</td><td>Not more than 300% of the specified value.</td></tr><tr><td>Leakage Current</td><td>Not more than the specified value.</td></tr></table> <table><tr><td>Temperature</td><td>Life Time (hrs)</td></tr><tr><td>125℃</td><td>3000</td></tr><tr><td>135℃</td><td>3000</td></tr></table>				Capacitance Change	Within ±30% of the initial value.	Dissipation Factor	Not more than 300% of the specified value.	Leakage Current	Not more than the specified value.	Temperature	Life Time (hrs)	125℃	3000	135℃	3000
Capacitance Change	Within ±30% of the initial value.															
Dissipation Factor	Not more than 300% of the specified value.															
Leakage Current	Not more than the specified value.															
Temperature	Life Time (hrs)															
125℃	3000															
135℃	3000															
Over temperature proof	After applying rated voltage for 500 hours at 150℃, the capacitors shall meet the following requirements. <table><tr><td>Capacitance Change</td><td>Within ±30% of the initial value.</td></tr><tr><td>Dissipation Factor</td><td>Not more than 300% of the specified value.</td></tr><tr><td>Leakage Current</td><td>Not more than the specified value.</td></tr></table>				Capacitance Change	Within ±30% of the initial value.	Dissipation Factor	Not more than 300% of the specified value.	Leakage Current	Not more than the specified value.						
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Low Temperature Stability Impedance Ratio(MAX)	<table><tr><td>Rated Voltage (Vdc)</td><td>25</td><td>35</td></tr><tr><td>Z(−25℃)/Z(20℃)</td><td>2</td><td>2</td></tr><tr><td>Z(−40℃)/Z(20℃)</td><td>3</td><td>3</td></tr></table> (120Hz)				Rated Voltage (Vdc)	25	35	Z(−25℃)/Z(20℃)	2	2	Z(−40℃)/Z(20℃)	3	3			
Rated Voltage (Vdc)	25	35														
Z(−25℃)/Z(20℃)	2	2														
Z(−40℃)/Z(20℃)	3	3														

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency (Hz)	120	1k	10k	100k≤
Coefficient	0.45	0.80	1.00	1.00

◆OPTION

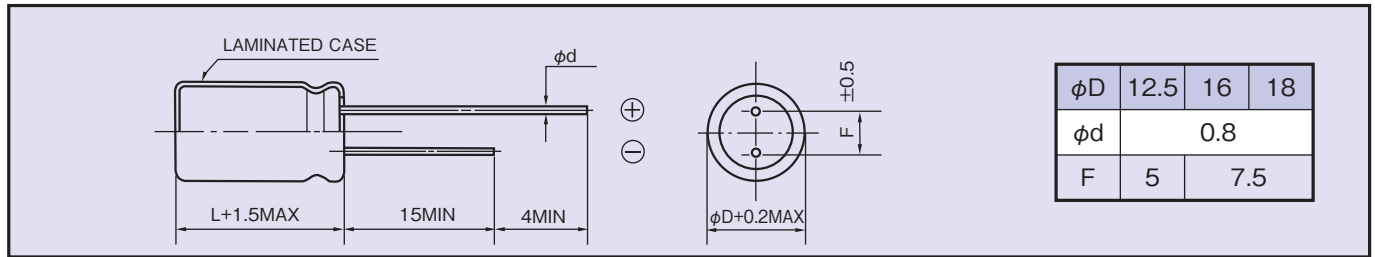
Standard item is blank.

◆PART NUMBER

Rated Voltage	Series	Capacitance	Capacitance Tolerance	Option	Lead Forming	Case Size

◆DIMENSIONS

(mm)



◆STANDARD SIZE

Rated Voltage (Vdc)	Capacitance (μF)	Size $\phi D \times L$ (mm)	Rated ripple current I_o (mA rms / 135°C, 100kHz)	Rated ripple current I_o (mA rms / 125°C, 100kHz)	ESR (Ω / 20°C, 100kHz)	MAX ripple current I_{MAX} (mA rms / 135°C, 100kHz)	MAX ripple current I_{MAX} (mA rms / 125°C, 100kHz)	MAX ripple current I_{MAX} (mA rms / 105°C, 100kHz)
25	1600	12.5×20	2060	2870	0.046	2260	2920	3910
	2400	12.5×25	2610	3640	0.034	2860	3700	4960
	3000	12.5×30	3130	4370	0.027	3440	4440	5960
	3000	16×20	2320	3240	0.034	2550	3300	4420
	3900	18×20	2490	3470	0.033	2730	3520	4730
	4300	16×25	2930	4090	0.025	3210	4150	5570
	5600	16×30	3500	4880	0.02	3840	4960	6650
	5600	18×25	3120	4360	0.025	3430	4430	5940
	6800	18×30	3720	5190	0.02	4090	5280	7080
35	1200	12.5×20	2060	2870	0.046	2260	2920	3910
	1600	12.5×25	2610	3640	0.034	2860	3700	4960
	2000	16×20	2320	3240	0.034	2550	3300	4420
	2200	12.5×30	3130	4370	0.027	3440	4440	5960
	2700	18×20	2490	3470	0.033	2730	3520	4730
	3000	16×25	2930	4090	0.025	3210	4150	5570
	3600	18×25	3120	4360	0.025	3430	4430	5940
	3900	16×30	3500	4880	0.02	3840	4960	6650
	4700	18×30	3720	5190	0.02	4090	5280	7080

Rated ripple current I_o : Ripple current continuous operation within endurance lifetime.

Maximum ripple current I_{MAX} : Maximum ripple current continuous operation. Estimated lifetime complies with our lifetime calculation formula.

