

HCGF5A Series

Useful of 4,000 hours at 85°C (Warranty of 2,000 hours at 85°C)

Features

- Standard products that have been used for many years.



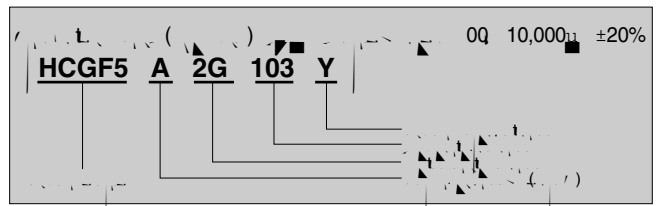
Product Specifications

Items	Specifications
Temperature range	-25°C ~ +85°C
Capacitance tolerance	±20% (20°C, 120Hz) 40°C
Rated voltage	160 ~ 450V.DC
Leakage current	0.01CV (µA) or 5mA, whichever is smaller or less [C = nominal capacitance (µF), V = rated voltage (V)]
Dissipation factor	Less than the value specified in the standard products table. (20°C, 120Hz)
Permissible ripple current	As specified in the standard products table. (40°C, 120Hz)
High-temperature load	After the rated voltage with specified ripple current is applied at 85°C for 2000 hours: Capacitance tolerance: ±15% or less of the initial value Dissipation factor: 175% or less of the specified initial value Leakage current: Specified initial value or less
Others	JIS C 5101-4.

Ripple current correction coefficient

Temperature (°C)	40	60	70	85	
Correction coefficient	1.0	0.75	0.62	0.37	
Frequency (Hz)	50/60	120	300	1K	10K
Correction coefficient	0.7	1.0	1.1	1.3	1.4

Ripple current should be under 60Arms at M5 terminal in accordance with from the permissible current.



Standard value and case size

Rated Voltage V. DC	Capacitance (µF)	Case size øDXL(mm)	Case code	tan δ		Ripple current (Arms) 40°C, 120Hz	Product name
				20°C, 120Hz	40°C, 120Hz		
160V(2C)	3300	36·121	A12	0.25	14.0	14.0	HCGF5A2C332L
	3900	51·75	C8R	0.25	14.4	14.4	HCGF5A2C392Y
	4700	51·75	C8R	0.25	15.8	15.8	HCGF5A2C472Y
	5600	51·96	C10R	0.25	19.0	19.0	HCGF5A2C562Y
	6800	51·96	C10R	0.25	21.0	21.0	HCGF5A2C682Y
	8200	51·115	C12R	0.25	24.7	24.7	HCGF5A2C822Y
	10000	64·96	D10R	0.25	28.0	28.0	HCGF5A2C103Y
	12000	64·96	D10R	0.25	30.6	30.6	HCGF5A2C123Y
	15000	64·130	D13R	0.25	38.6	38.6	HCGF5A2C153Y
	18000	64·130	D13R	0.25	42.2	42.2	HCGF5A2C183Y
	22000	77·130	E13R	0.25	49.4	49.4	HCGF5A2C223Y
	27000	77·130	E13R	0.25	54.7	54.7	HCGF5A2C273Y
	33000	90·131	F13R	0.25	64.2	64.2	HCGF5A2C333Y
	39000	90·157	F16R	0.25	75.3	75.3	HCGF5A2C393Y

Rated Voltage V. DC	Capacitance (µF)	Case size øDXL(mm)	Case code	tan δ		Ripple current (Arms) 40°C, 120Hz	Product name
				20°C, 120Hz	40°C, 120Hz		
200V(2D)	2200	36·100	A10	0.25	10.6	10.6	HCGF5A2D222L
	2700	36·121	A12	0.25	12.7	12.7	HCGF5A2D272L
	3300	51·75	C8R	0.25	13.3	13.3	HCGF5A2D332Y
	3900	51·75	C8R	0.25	14.4	14.4	HCGF5A2D392Y
	4700	51·96	C10R	0.25	17.4	17.4	HCGF5A2D472Y
	5600	51·115	C12R	0.25	20.4	20.4	HCGF5A2D562Y
	6800	51·130	C13R	0.25	23.7	23.7	HCGF5A2D682Y
	8200	64·96	D10R	0.25	25.4	25.4	HCGF5A2D822Y
	10000	64·96	D10R	0.25	28.0	28.0	HCGF5A2D103Y
	12000	77·96	E10R	0.25	32.6	32.6	HCGF5A2D123Y
	15000	77·96	E10R	0.25	39.0	39.0	HCGF5A2D153Y
	18000	77·130	E13R	0.25	44.6	44.6	HCGF5A2D183Y
	22000	77·155	E16R	0.25	53.0	53.0	HCGF5A2D223Y
	27000	90·131	F13R	0.25	58.2	58.2	HCGF5A2D273Y
	33000	90·157	F16R	0.25	69.0	69.0	HCGF5A2D333Y

Attachment of legs

- See page 49 for shapes and dimensions.
- Product names in the Standard Units Rating Table correspond to the attachment legs for Type Y (Type Γ for ø36 only), but Type Γ attachment legs may be used (Shape Code = Γ).
- If attachment legs are not necessary, enter "N" for the attachment leg shape code.
- Attachment legs will be delivered separately.

Rated Voltage V. DC	Capacitance (µF)	Case size øDXL(mm)	Case code	tan δ 20°C, 120Hz	tan δ 40°C, 120Hz	Ripple current (Arms) 40°C, 120Hz	Product name
							HCGF5A2E182L
							HCGF5A2E222Y
							HCGF5A2E272Y
							HCGF5A2E332Y
							HCGF5A2E392Y
							HCGF5A2E472Y
							HCGF5A2E562Y
							HCGF5A2E682Y
							HCGF5A2E822Y
							HCGF5A2E103Y
							HCGF5A2E123Y
							HCGF5A2E153Y
							HCGF5A2E183Y
							HCGF5A2E223Y

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Rated Voltage V. DC	Capacitance (μ F)	Case size ϕ DXL(mm)	Case code	$\tan\delta$ 20°C,120Hz	Ripple current (Arms) 40°C,120Hz	Product name
350V(2V)	390	36·53	A5	0.20	4.5	HCGF5A2V3911
	470	36·83	A8	0.20	5.8	HCGF5A2V4711
	560	36·83	A8	0.20	6.4	HCGF5A2V5611
	680	36·83	A8	0.20	7.0	HCGF5A2V6811
	820	36·100	A10	0.20	8.3	HCGF5A2V8211
	1000	36·100	A10	0.20	9.2	HCGF5A2V1021
	1200	51·75	C8R	0.20	10.3	HCGF5A2V122Y
	1500	51·75	C8R	0.20	11.5	HCGF5A2V152Y
	1800	51·96	C10R	0.20	13.9	HCGF5A2V182Y
	2200	51·96	C10R	0.20	15.4	HCGF5A2V222Y
	2700	51·130	C13R	0.20	19.3	HCGF5A2V272Y
	3300	51·130	C13R	0.20	21.4	HCGF5A2V332Y
	3900	64·115	D12R	0.20	24.2	HCGF5A2V392Y
	4700	64·130	D13R	0.20	27.9	HCGF5A2V472Y
	5600	77·115	E12R	0.20	30.7	HCGF5A2V562Y
	6800	77·130	E13R	0.20	35.4	HCGF5A2V682Y
	8200	77·155	E16R	0.20	41.7	HCGF5A2V822Y
	10000	90·157	F16R	0.20	49.0	HCGF5A2V103Y
12000	90·157	F16R	0.20	54.1	HCGF5A2V123Y	
15000	90·196	F20R	0.20	66.2	HCGF5A2V153Y	
18000	90·236	F24R	0.20	77.9	HCGF5A2V183Y	

Rated Voltage V. DC	Capacitance (μ F)	Case size ϕ DXL(mm)	Case code	$\tan\delta$ 20°C,120Hz	Ripple current (Arms) 40°C,120Hz	Product name
400V(2G)	330	36·53	A5	0.20	4.1	HCGF5A2G3311
	390	36·83	A8	0.20	5.3	HCGF5A2G3911
	470	36·83	A8	0.20	5.8	HCGF5A2G4711
	560	36·83	A8	0.20	6.4	HCGF5A2G5611
	680	36·100	A10	0.20	7.6	HCGF5A2G6811
	820	36·100	A10	0.20	8.3	HCGF5A2G8211
	1000	51·75	C8R	0.20	9.4	HCGF5A2G102Y
	1200	51·75	C8R	0.20	10.3	HCGF5A2G122Y
	1500	51·96	C10R	0.20	12.7	HCGF5A2G152Y
	1800	51·96	C10R	0.20	13.9	HCGF5A2G182Y
	2200	51·130	C13R	0.20	17.4	HCGF5A2G222Y
	2700	64·96	D10R	0.20	18.8	HCGF5A2G272Y
	3300	64·115	D12R	0.20	22.2	HCGF5A2G332Y
	3900	64·130	D13R	0.20	25.4	HCGF5A2G392Y
	4700	77·115	E12R	0.20	28.2	HCGF5A2G472Y
	5600	77·130	E13R	0.20	32.2	HCGF5A2G562Y
	6800	77·155	E16R	0.20	38.0	HCGF5A2G682Y
	8200	90·157	F16R	0.20	44.4	HCGF5A2G822Y
10000	90·157	F16R	0.20	49.4	HCGF5A2G103Y	
12000	90·196	F20R	0.20	59.1	HCGF5A2G123Y	
15000	90·236	F24R	0.20	71.1	HCGF5A2G153Y	

Rated Voltage V. DC	Capacitance (μ F)	Case size ϕ DXL(mm)	Case code	$\tan\delta$ 20°C,120Hz	Ripple current (Arms) 40°C,120Hz	Product name
450V(2W)	270	36·53	A5	0.20	3.7	HCGF5A2W2711
	330	36·83	A8	0.20	4.9	HCGF5A2W3311
	390	36·83	A8	0.20	5.3	HCGF5A2W3911
	470	36·83	A8	0.20	5.8	HCGF5A2W4711
	560	36·100	A10	0.20	6.9	HCGF5A2W5611
	680	36·100	A10	0.20	7.6	HCGF5A2W6811
	820	51·75	C8R	0.20	8.6	HCGF5A2W821Y
	1000	51·75	C8R	0.20	9.4	HCGF5A2W102Y
	1200	51·96	C10R	0.20	11.4	HCGF5A2W122Y
	1500	51·115	C12R	0.20	13.7	HCGF5A2W152Y
	1800	51·130	C13R	0.20	15.8	HCGF5A2W182Y
	2200	64·96	D10R	0.20	17.0	HCGF5A2W222Y
	2700	64·115	D12R	0.20	20.2	HCGF5A2W272Y
	3300	64·130	D13R	0.20	23.4	HCGF5A2W332Y
	3900	77·115	E12R	0.20	25.6	HCGF5A2W392Y
	4700	77·130	E13R	0.20	29.4	HCGF5A2W472Y
	5600	77·155	E16R	0.20	34.6	HCGF5A2W562Y
	6800	90·157	F16R	0.20	40.5	HCGF5A2W682Y
8200	90·157	F16R	0.20	44.6	HCGF5A2W822Y	
10000	90·196	F20R	0.20	53.9	HCGF5A2W103Y	
12000	90·236	F24R	0.20	63.8	HCGF5A2W123Y	

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