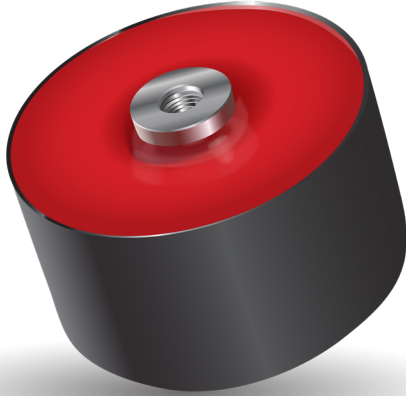


DC FILTERING

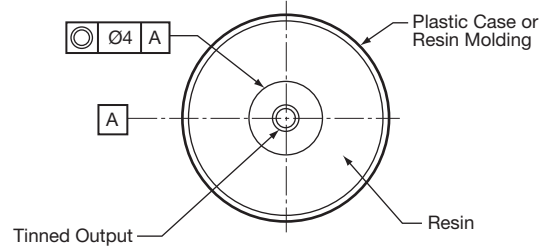
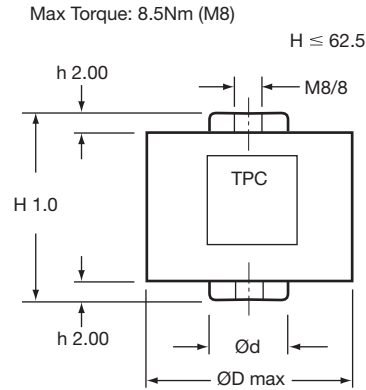
FFG Design (FFH-RoHS Compliant)

DC FILTERING



DIMENSIONS (CASE SIZES)

plastic case – Outputs: threaded insert M8 filled with thermosetting resin



General Tolerance: 2

GENERAL DESCRIPTION

The FFG series uses a non-impregnated metallized dielectric, which features a controlled self-healing process.

PACKAGING MATERIAL

Self-extinguishing plastic case (V0 = in accordance with UL 94) filled thermosetting resin. Self-extinguishing thermosetting resin (V0 = in accordance with UL 94; I3F1 = in accordance with NF F 16-101).

STANDARDS

- IEC 61071-1, IEC 61071-2: Power electronic capacitors
- IEC 60068-1: Environmental testing
- UL 94: Fire requirement

HOT SPOT CALCULATION

$$\theta_{hot\ spot} = \theta_{terminal} + (P_d + P_t) \times R_{th}$$

with P_d (Dielectric losses) = $Q \times tg\delta_0$ and $tg\delta_0 = 2.10$, where $Q = \frac{I_{rms}^2}{C \cdot 2 \cdot \pi \cdot f}$

P_t (Thermal losses) = $R_s \times I_{rms}^2$

where C_n in Farad, V in Volt, R_{th} in °C/W, I_{rms} in Ampere, R_s in Ohm, f in Hertz, θ in °C

HOW TO ORDER

FFG

Series
FFG = Standard
FFH = RoHS Compliant

8

Case Size
8

6

Dielectric
6 = Polypropylene

K

Voltage Code
K = 600Vdc
B = 800Vdc
C = 900Vdc
L = 1000Vdc
U = 1200Vdc
N = 1900Vdc

0376

Capacitance Code
0 + pF code
0376 = 36µF
0256 = 25µF
0505 = 5µF
etc.

K

Capacitance Tolerances
K = ±10%

--

Voltage Range
-- = < 1kV
J7 = ≥ 1kV

Not RoHS Compliant



Please select correct termination style.

Архангельск (8182)63-90-72
Астана (7172)727-132
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
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Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06

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Томск (3822)96-41-53
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Хабаровск (4212)92-98-04
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93

DC FILTERING

FFG (FFH RoHS Compliant)

ELECTRICAL CHARACTERISTICS

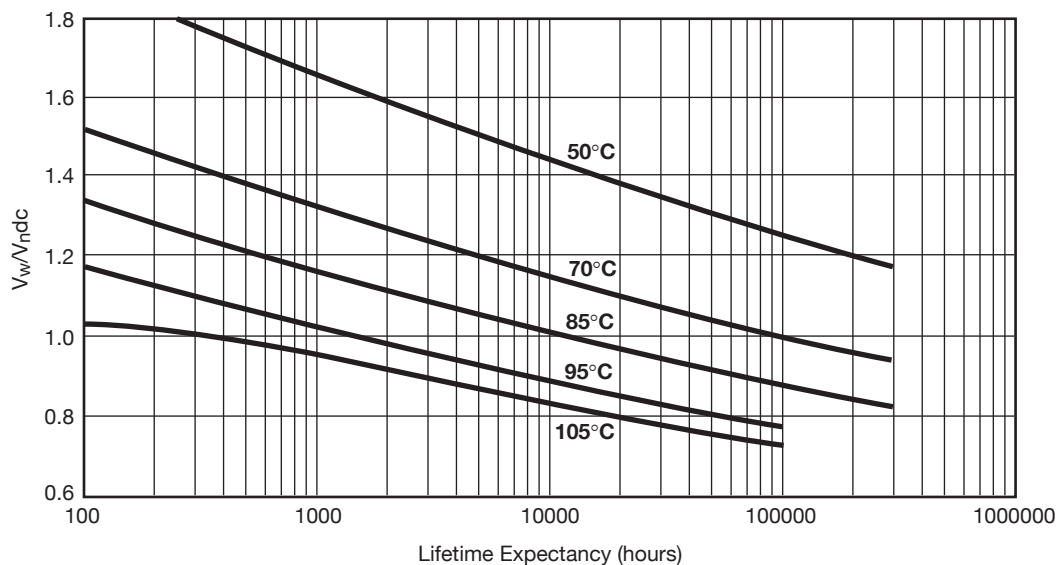
Items	Characteristics
Operating temperature:	-40°C + 105°C
Storage temperature:	-55°C + 85°C
Capacitance range:	5µF to 160µF
Rated DC voltage V _{ndc} :	600 to 900 V
Capacitance tolerance:	±10%
Test voltage between terminals:	@ 25°C: 1.5 x U _{n,dc} during 10s
Test voltage between terminals and case:	@ 25°C: @ 4 kVrms @ 50 Hz during 1 mn (test type)
Dielectric:	Polypropylene

RATINGS AND PART NUMBER REFERENCE (600V TO 900V)

Part Number	C _n (µF)	Height ±1 (mm)	h ±2 (mm)	D max (mm)	d ±0.50 (mm)	I ² t max (A ² s)	I _{rms} max (A)	R _s (mΩ)	R _{th} (°C/W)	Typical Weight (g)
U_{ndc} 600 V (Voltage Code K)										
FFG86K0376K-	37	52	5	60	22	4	28	1.3	10.1	190
FFG86K0586K-	58	52	5	72	22	10	44	1	6.4	260
FFG86K0806K-	80	52	5	82	22	20	61	0.7	4.9	320
FFG86K0167K-	160	62.5	5	92	22	32	76	0.8	5.8	475
U_{n,dc} 800 V (Voltage Code B)										
FFG86B0236K-	23	52	5	60	22	3	26	1.7	10.1	190
FFG86B0376K-	37	52	5	72	22	8	43	1.2	6.5	260
FFG86B0516K-	51	52	5	82	22	15	59	0.9	4.8	320
FFG86B0107K-	100	62.5	5	92	22	24	73	1	5.9	475
U_{n,dc} 900 V (Voltage Code C)										
FFG86C0166K-	16	52	5	60	22	2.8	27	2	9.8	190
FFG86C0266K-	26	52	5	72	22	7	44	1.3	6.5	260
FFG86C0356K-	35	52	5	82	22	13	60	1	4.8	320
FFG86C0706K-	70	62.5	5	92	22	20	75	1.2	5.8	475

Dimensions millimeters

LIFETIME EXPECTANCY vs HOT SPOT TEMPERATURE AND VOLTAGE



V_w = Permanent working or operating DC voltage.

ELECTRICAL CHARACTERISTICS

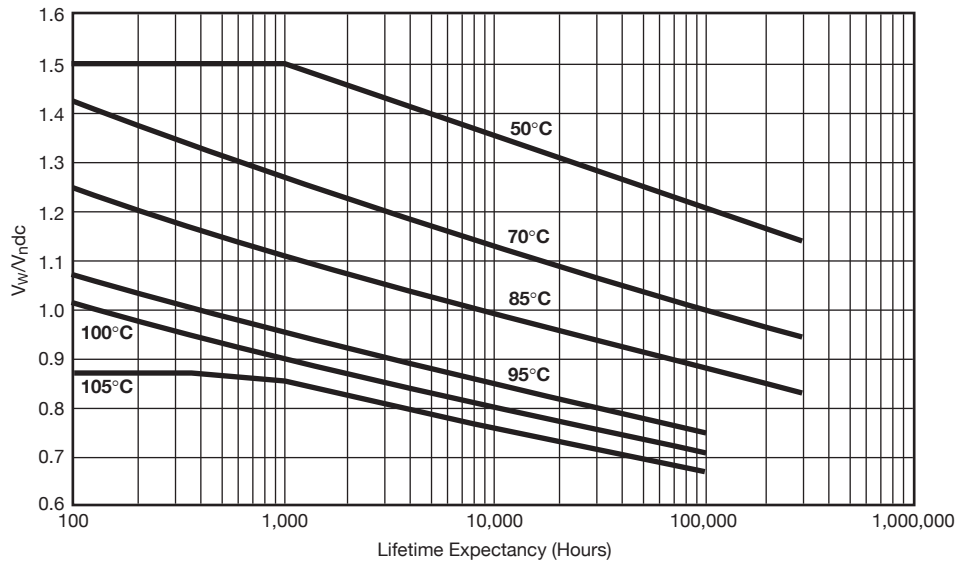
Items	Characteristics
Operating temperature:	-40°C + 105°C
Storage temperature:	-55°C + 85°C
Capacitance range:	5µF to 160µF
Rated DC voltage V _{ndc} :	1000 to 1900 V
Capacitance tolerance:	±10%
Test voltage between terminals:	@ 25°C: 1.5 x U _{n,dc} during 10s
Test voltage between terminals and case:	@ 25°C: @ 4 kVrms @ 50 Hz during 1 mn (test type)
Dielectric:	Polypropylene

RATINGS AND PART NUMBER REFERENCE (1000V TO 1900V)

Part Number	Cn (µF)	Height ±1 (mm)	h ±2 (mm)	D max (mm)	d ±0.50 (mm)	I ² t max (A2s)	I _{rms} max (A)	R _s (mΩ)	R _{th} (°C/W)	Typical Weight (g)
U_{n,dc} 600 V (Voltage Code K)										
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FFG86C0166K-	16	52	5	60	22	2.8	27	2	9.8	190
FFG86C0266K-	26	52	5	72	22	7	44	1.3	6.5	260
FFG86C0356K-	35	52	5	82	22	13	60	1	4.8	320
FFG86C0706K-	70	62.5	5	92	22	20	75	1.2	5.8	475

Dimensions millimeters

LIFETIME EXPECTANCY vs HOT SPOT TEMPERATURE AND VOLTAGE



V_w = Permanent working or operating DC voltage.

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