

### Overview

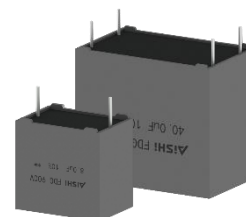
The FDG capacitor is constructed of metallized polypropylene film encapsulated with epoxy resin in a plastic box, with 2 or 4 tinned copper wire. These FDG series is suitable for harsh environment conditions and compliant to THB Grade IIIB.

### Applications


Widely used in high performance DC Link, DC filtering, frequency converters, industrial power supply, solar inverter and energy storage. Not suitable for across the line application.

### Features

- Self-healing
- High capacitance density
- High ripple current and low loss
- High contact reliability
- Suitable for high frequency applications
- Suitable for harsh environmental conditions.
- THB Grade IIIB.
- Passed 85°C 85%RH 1.0Un for 1000 hours.

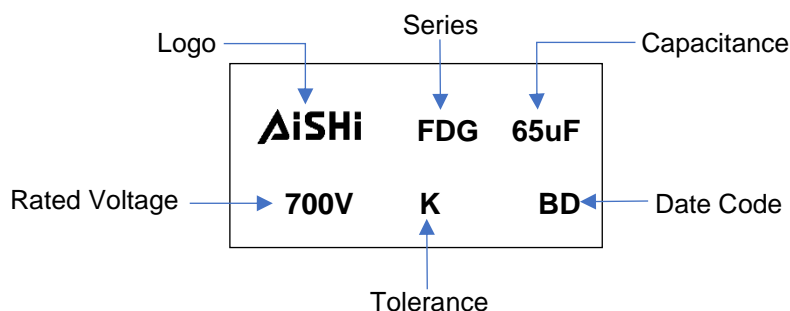


### Approvals

Marking	Specification	File Number
	UL 810	E500537



### Marking



### Manufacturing Date Code

Year	Code	Month	Code
2018	A	Jan	1
2019	B	Feb	2
2020	C	Mar	3
2021	D	Apr	4
2022	E	May	5
2023	F	Jun	6

Year	Code	Month	Code
2024	G	Jul	7
2025	H	Aug	8
2026	J	Sep	9
2027	K	Oct	A
2028	L	Nov	N
2029	M	Dec	D

**Part Number System**

<b>F</b>	<b>DG</b>	<b>2M</b>	<b>K</b>	<b>756</b>	<b>M20</b>	<b>4MD</b>	<b>5</b>
Capacitor Type	Series	Voltage (VDC)	Tolerance	Capacitance (pF)	Size Code	Terminal Code	Lead Length Code
F = Film	DC Link, THB Type, Metallized PP Film	450=2W 500=2H 550=2J 600=2K 700=2M 800=2N 900=2Q 1000=3K 1100=3M 1200=3B	J = ±5% K = ±10% M = ±20%	First two digits = significant figures. Third digit = Number of zeros.	Refer to Size Code Table	Refer to Terminal Code Table	Refer to Lead Length Code Table

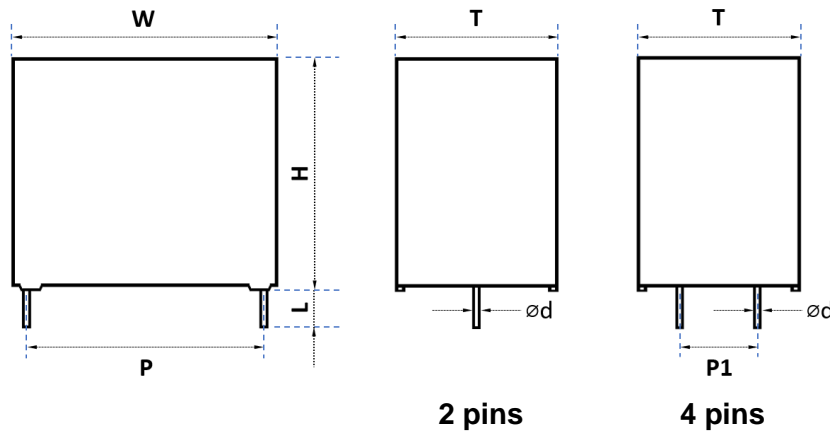
**Terminal Code**

Digit One (Lead/Terminal Type)		Digit Two (Lead Space)		Digit Three (Lead Ipsilateral)	
2 leads for long	L	27.5mm	G	10.2mm	B
2 leads for straight cut	2	37.5mm	K	12.7mm	G
2 leads for forming cut	E	57.5mm	M	20.3mm	D
4 leads for straight cut	4	N/A	N	N/A	L
6 leads for straight cut	6				

**Lead Length Code**

Lead Length	
3.0mm	3
4.0mm	4
5.0mm	5
7.0mm	7
20.0mm min	L

**Dimension (mm)**



**Size Code Table (mm)**

Size Code	Dimension						Pitch				Ød		
	W	Tolerance	H	Tolerance	T	Tolerance	P	Tolerance	P1	Tolerance	4 Leads	2 Leads	Tolerance
G15	32.0	0.8	18.0	0.8	9.0	0.8	27.5	0.5	/	/	/	0.8	0.05
G18	32.0	0.8	20.0	0.8	11.0	0.8	27.5	0.5	/	/	/	0.8	0.05
G21	32.0	0.8	22.0	0.8	13.0	0.8	27.5	0.5	/	/	/	0.8	0.05
G26	32.0	0.8	28.0	0.8	14.0	0.8	27.5	0.5	/	/	/	0.8	0.05
G27	32.0	0.8	24.5	0.8	15.0	0.8	27.5	0.5	/	/	/	0.8	0.05
G33	32.0	0.8	28.0	0.8	18.0	0.8	27.5	0.5	/	/	/	0.8	0.05
G34	32.0	0.8	33.0	0.8	18.0	0.8	27.5	0.5	/	/	/	0.8	0.05
G40	32.0	0.8	37.0	0.8	22.0	0.8	27.5	0.5	10.2	0.5	1.2	0.8	0.05
K21	42.5	0.8	32.0	0.8	19.0	0.8	37.5	0.5	10.2	0.5	1.2	1.0	0.05
K24	42.5	0.8	40.0	0.8	20.0	0.8	37.5	0.5	10.2	0.5	1.2	1.0	0.05
K26	42.5	0.8	33.5	0.8	22.0	0.8	37.5	0.5	10.2	0.5	1.2	1.0	0.05
K27	42.5	0.8	37.0	0.8	22.0	0.8	37.5	0.5	10.2	0.5	1.2	1.0	0.05
K30	42.5	0.8	18.0	0.8	24.0	0.8	37.5	0.5	10.2	0.5	1.2	1.0	0.05
K32	42.5	0.8	44.0	0.8	24.0	0.8	37.5	0.5	10.2	0.5	1.2	1.0	0.05
K37	42.5	0.8	37.0	0.8	28.0	0.8	37.5	0.5	10.2	0.5	1.2	1.0	0.05
K42	42.5	0.8	45.0	0.8	30.0	0.8	37.5	0.5	20.3	0.5	1.2	1.0	0.05
K47	42.5	0.8	50.0	0.8	35.0	0.8	37.5	0.5	20.3	0.5	1.2	1.0	0.05
M16	57.5	1.0	45.0	1.0	30.0	1.0	52.5	0.5	20.3	0.5	1.2	1.2	0.05
M20	57.5	1.0	50.0	1.0	35.0	1.0	52.5	0.5	20.3	0.5	1.2	1.2	0.05
M22	57.5	1.0	60.0	1.0	35.0	1.0	52.5	0.5	20.3	0.5	1.2	1.2	0.05
M23	57.5	1.0	65.0	1.0	35.0	1.0	52.5	0.5	20.3	0.5	1.2	1.2	0.05
M24	57.5	1.0	70.0	1.0	35.0	1.0	52.5	0.5	20.3	0.5	1.2	1.2	0.05
M25	57.5	1.0	80.0	1.0	35.0	1.0	52.5	0.5	20.3	0.5	1.2	1.2	0.05
M30	57.5	1.0	22.0	1.0	43.0	1.0	52.5	0.5	20.3	0.5	1.2	1.2	0.05
M32	57.5	1.0	55.0	1.0	45.0	1.0	52.5	0.5	20.3	0.5	1.2	1.2	0.05
M34	57.5	1.0	65.0	1.0	45.0	1.0	52.5	0.5	20.3	0.5	1.2	1.2	0.05
M35	57.5	1.0	53.0	1.0	50.0	1.0	52.5	0.5	20.3	0.5	1.2	1.2	0.05

# Metallized Polypropylene Film DC-Link Capacitors

## FDG Series - 450 ~ 1200VDC for Harsh Environmental Conditions



### Rating and Part Number

Vdc	Cap Value µF	Dimensions					Irms 10KHz A 70°C	Peak Current A	Surge Current A	ESR 10KHz mΩ	ESL nH	Thermal Res °C/W	dv/dt V/us	Lead Wire mm	Part Number
		W	H	T	P	P1									
		mm	mm	mm	mm	mm									
450	1	32.0	18.0	9.0	27.5	\	2.5	60	180	45.0	25	51.7	60	0.8	FDG2WK105G152GL5
450	2	32.0	18.0	9.0	27.5	\	3.0	120	360	30.0	25	50.5	60	0.8	FDG2WK205G152GL5
450	3	32.0	20.0	11.0	27.5	\	4.0	180	540	20.0	25	49.3	60	0.8	FDG2WK305G182GL5
450	4	32.0	20.0	11.0	27.5	\	4.0	240	720	18.0	25	48.4	60	0.8	FDG2WK405G182GL5
450	5	32.0	20.0	11.0	27.5	\	5.0	300	900	12.0	25	47.1	60	0.8	FDG2WK505G182GL5
450	5	32.0	22.0	13.0	27.5	\	5.5	300	900	11.0	25	46.5	60	0.8	FDG2WK505G212GL5
450	10	32.0	28.0	14.0	27.5	\	7.5	600	1800	8.5	25	23.7	60	0.8	FDG2WK106G262GL5
450	10	32.0	28.0	18.0	27.5	\	9.0	600	1800	8.0	25	23.7	60	0.8	FDG2WK106G332GL5
450	12	32.0	33.0	18.0	27.5	\	10.0	720	2160	7.0	25	20.5	60	0.8	FDG2WK126G342GL5
450	15	32.0	37.0	22.0	27.5	\	11.5	900	2700	6.0	25	14.5	60	0.8	FDG2WK156G402GL5
450	15	42.5	18.0	24.0	37.5	\	9.5	450	1350	8.5	25	15.5	30	1.0	FDG2WK156K302KL5
450	18	32.0	37.0	22.0	27.5	\	10.0	1080	3240	6.0	28	13.8	60	0.8	FDG2WK186G402GL5
450	20	32.0	37.0	22.0	27.5	\	11.0	1200	3600	5.0	28	12.8	60	0.8	FDG2WK206G402GL5
450	22	32.0	37.0	22.0	27.5	\	12.5	1320	3960	5.0	28	12.8	60	0.8	FDG2WK226G402GL5
450	25	42.5	37.0	22.0	37.5	10.2	12.5	875	2625	5.5	30	12.3	35	1.2	FDG2WK256K274KB5
450	30	42.5	40.0	20.0	37.5	10.2	12.0	1050	3150	6.0	30	11.6	35	1.2	FDG2WK306K244KB5
450	40	42.5	37.0	28.0	37.5	10.2	14.0	1400	4200	5.5	30	9.3	35	1.2	FDG2WK406K374KB5
450	40	42.5	44.0	24.0	37.5	10.2	15.0	1400	4200	5.2	30	9.0	35	1.2	FDG2WK406K324KB5
450	40	57.5	22.0	43.0	52.5	20.3	12.0	800	2400	8.0	30	9.5	20	1.2	FDG2WK406M304MD5
450	50	42.5	45.0	30.0	37.5	20.3	15.0	1750	5250	4.0	30	11.1	35	1.2	FDG2WK506K424KD5
450	50	57.5	22.0	43.0	52.5	20.3	14.0	1000	3000	6.5	30	9.5	20	1.2	FDG2WK506M304MD5
450	55	57.5	45.0	30.0	52.5	20.3	15.5	1100	3300	5.0	30	9.8	20	1.2	FDG2WK556M164MD5
450	60	57.5	45.0	30.0	52.5	20.3	16.5	1200	3600	4.5	30	9.2	20	1.2	FDG2WK606M164MD5
450	60	42.5	45.0	30.0	37.5	20.3	16.5	2100	6300	4.0	30	8.6	35	1.2	FDG2WK606K424KD5
450	80	57.5	45.0	30.0	52.5	20.3	16.0	1600	4800	4.0	35	7.4	20	1.2	FDG2WK806M164MD5
450	100	57.5	50.0	35.0	52.5	20.3	18.0	2000	6000	3.8	35	6.2	20	1.2	FDG2WK107M204MD5
450	130	57.5	60.0	35.0	52.5	20.3	22.0	2600	7800	3.5	35	5.5	20	1.2	FDG2WK137M224MD5
450	140	57.5	65.0	35.0	52.5	20.3	24.0	2800	8400	3.4	35	5.4	20	1.2	FDG2WK147M234MD5
450	150	57.5	70.0	35.0	52.5	20.3	26.0	3000	9000	3.2	35	5.2	20	1.2	FDG2WK157M244MD5
450	160	57.5	80.0	35.0	52.5	20.3	28.0	3200	9600	3.1	35	5.0	20	1.2	FDG2WK167M254MD5
450	170	57.5	80.0	35.0	52.5	20.3	30.0	3400	10200	3.0	35	4.8	20	1.2	FDG2WK177M254MD5
550	3	32.0	20.0	11.0	27.5	\	4.0	180	540	28.0	25	22.3	60	0.8	FDG2JK305G182GL5
550	5	32.0	22.0	13.0	27.5	\	6.0	300	900	14.0	25	16.8	60	0.8	FDG2JK505G212GL5
550	8	32.0	28.0	14.0	27.5	\	8.5	480	1440	12.5	25	12.6	60	0.8	FDG2JK805G262GL5
550	10	32.0	33.0	18.0	27.5	\	10.0	600	1800	8.0	25	12.5	60	0.8	FDG2JK106G342GL5
550	15	32.0	37.0	22.0	27.5	\	12.0	900	2700	6.5	28	9.1	60	0.8	FDG2JK156G402GL5
550	15	32.0	37.0	22.0	27.5	10.2	13.0	900	2700	5.5	28	8.1	60	1.2	FDG2JK156G404GB5
550	15	42.5	18.0	24.0	37.5	\	10.5	900	2700	6.5	28	8.3	60	1.0	FDG2JK156K302KL5
550	20	42.5	40.0	20.0	37.5	10.2	12.5	700	2100	6.5	30	9.8	35	1.2	FDG2JK206K244KB5
550	22	42.5	40.0	20.0	37.5	10.2	13.5	770	2310	6.5	30	8.4	35	1.2	FDG2JK226K244KB5
550	25	42.5	40.0	20.0	37.5	10.2	14.5	875	2625	6.5	30	7.3	35	1.2	FDG2JK256K244KB5
550	30	42.5	44.0	24.0	37.5	10.2	16.0	1050	3150	6.0	30	6.5	35	1.2	FDG2JK306K324KB5
550	35	42.5	45.0	30.0	37.5	20.3	18.0	1225	3675	6.0	30	5.1	35	1.2	FDG2JK356K424KD5
550	40	42.5	45.0	30.0	37.5	20.3	18.0	1400	4200	5.5	30	5.1	35	1.2	FDG2JK406K424KD5
550	40	57.5	22.0	43.0	52.5	20.3	16.0	1400	4200	5.8	30	5.2	35	1.2	FDG2JK406M304MD5
550	50	42.5	50.0	35.0	37.5	20.3	20.0	1750	5250	5.0	30	5.0	35	1.2	FDG2JK506K474KD5
550	60	57.5	45.0	30.0	52.5	20.3	18.0	1200	3600	4.8	35	6.2	20	1.2	FDG2JK606M164MD5
550	75	57.5	50.0	35.0	52.5	20.3	20.0	1500	4500	5.0	35	5.0	20	1.2	FDG2JK756M204MD5

# Metallized Polypropylene Film DC-Link Capacitors

## FDG Series - 450 ~ 1200VDC for Harsh Environmental Conditions



### Rating and Part Number

Vdc	Cap Value µF	Dimensions					Irms 10KHz 70°C A	Peak Current A	Surge Current A	ESR 10KHz mΩ	ESL nH	Thermal Res °C/W	dv/dt V/us	Lead Wire mm	Part Number
		W	H	T	P	P1									
		mm	mm	mm	mm	mm									
550	100	57.5	55.0	45.0	52.5	20.3	24.0	2000	6000	4.5	35	3.9	20	1.2	FDG2JK107M324MD5
550	110	57.5	55.0	45.0	52.5	20.3	26.0	2200	6600	4.0	35	3.7	20	1.2	FDG2JK117M324MD5
550	130	57.5	60.0	35.0	52.5	20.3	23.0	2600	7800	3.4	35	5.4	20	1.2	FDG2JK137M224MD5
550	140	57.5	65.0	35.0	52.5	20.3	25.0	2800	8400	3.3	35	5.3	20	1.2	FDG2JK147M234MD5
550	150	57.5	70.0	35.0	52.5	20.3	27.0	3000	9000	3.1	35	5.0	20	1.2	FDG2JK157M244MD5
550	160	57.5	80.0	35.0	52.5	20.3	29.0	3200	9600	3.0	35	4.8	20	1.2	FDG2JK167M254MD5
550	170	57.5	80.0	35.0	52.5	20.3	32.0	3400	10200	2.8	35	4.7	20	1.2	FDG2JK177M254MD5
600	3.0	32.0	20.0	11.0	27.5	\	4.0	180	540	28.0	25	22.3	60	0.8	FDG2KK305G182GL5
600	4.0	32.0	20.0	11.0	27.5	\	5.0	240	720	26.0	25	14.3	60	0.8	FDG2KK405G182GL5
600	5.0	32.0	28.0	14.0	27.5	\	6.0	300	900	14.5	25	26.5	60	0.8	FDG2KK505G262GL5
600	8.0	32.0	28.0	14.0	27.5	\	7.5	480	1440	12.0	25	17.8	60	0.8	FDG2KK805G262GL5
600	10.0	32.0	33.0	18.0	27.5	\	8.5	600	1800	7.5	25	19.8	60	0.8	FDG2KK106G342GL5
600	12.0	32.0	33.0	18.0	27.5	\	9.5	720	2160	7.5	25	15.8	60	0.8	FDG2KK126G342GL5
600	12.0	42.5	18.0	24.0	37.5	\	8.0	420	1260	9.5	25	16.8	35	1.0	FDG2KK126K302KL5
600	15.0	32.0	37.0	22.0	27.5	\	10.5	900	2700	7.5	28	12.1	60	0.8	FDG2KK156G402GL5
600	15.0	42.5	18.0	24.0	37.5	\	12.0	525	1575	6.0	28	16.2	35	1.0	FDG2KK156K302KL5
600	20.0	42.5	40.0	20.0	37.5	10.2	11.0	700	2100	6.0	30	13.8	35	1.2	FDG2KK206K244KB5
600	30.0	42.5	37.0	28.0	37.5	10.2	13.0	1050	3150	5.5	30	10.8	35	1.2	FDG2KK306K374KB5
600	35.0	42.5	44.0	24.0	37.5	10.2	16.5	1225	3675	5.0	30	8.5	35	1.2	FDG2KK356K324KB5
600	35.0	57.5	22.0	43.0	52.5	20.3	13.5	700	2100	5.5	30	10.7	20	1.2	FDG2KK356M304MD5
600	40.0	42.5	45.0	30.0	37.5	20.3	18.0	1400	4200	4.0	30	7.7	35	1.2	FDG2KK406K424KD5
600	50.0	57.5	50.0	35.0	52.5	20.3	14.0	1000	3000	6.5	35	7.8	20	1.2	FDG2KK506M204MD5
600	60.0	57.5	50.0	35.0	52.5	20.3	16.0	1200	3600	5.0	35	7.8	20	1.2	FDG2KK606M204MD5
600	70.0	57.5	50.0	35.0	52.5	20.3	18.0	1400	4200	5.0	35	6.2	20	1.2	FDG2KK706M204MD5
600	80.0	57.5	55.0	45.0	52.5	20.3	20.0	1600	4800	4.0	35	6.3	20	1.2	FDG2KK806M324MD5
600	90.0	57.5	55.0	45.0	52.5	20.3	24.0	1800	5400	4.0	35	4.3	20	1.2	FDG2KK906M324MD5
600	100.0	57.5	53.0	50.0	52.5	20.3	26.0	2000	6000	4.0	35	3.7	20	1.2	FDG2KK107M354MD5
600	110.0	57.5	53.0	50.0	52.5	20.3	28.0	2200	6600	3.5	35	3.6	20	1.2	FDG2KK117M354MD5
600	120.0	57.5	60.0	35.0	52.5	20.3	30.0	2400	7200	3.4	35	3.5	20	1.2	FDG2KK127M224MD5
600	130.0	57.5	65.0	35.0	52.5	20.3	32.0	2600	7800	3.3	35	3.4	20	1.2	FDG2KK137M234MD5
600	140.0	57.5	70.0	35.0	52.5	20.3	34.0	2800	8400	3.2	35	3.4	20	1.2	FDG2KK147M244MD5
600	140.0	57.5	65.0	45.0	52.5	20.3	34.0	2800	8400	3.2	35	3.4	20	1.2	FDG2KK147M344MD5
600	150.0	57.5	80.0	35.0	52.5	20.3	36.0	3000	9000	3.0	35	3.3	20	1.2	FDG2KK157M254MD5
700	1.0	32.0	18.0	9.0	27.5	\	2.5	60	180	54.0	25	50.6	60	0.8	FDG2MK105G152GL5
700	2.0	32.0	18.0	9.0	27.5	\	3.0	120	360	35.0	25	49.5	60	0.8	FDG2MK205G152GL5
700	3.0	32.0	20.0	11.0	27.5	\	4.5	180	540	28.0	25	47.0	60	0.8	FDG2MK305G182GL5
700	3.3	32.0	28.0	14.0	27.5	\	5.5	198	594	26.0	25	31.5	60	0.8	FDG2MK335G262GL5
700	5.0	32.0	28.0	14.0	27.5	\	6.0	300	900	14.0	25	26.5	60	0.8	FDG2MK505G262GL5
700	6.0	32.0	28.0	18.0	27.5	\	6.0	360	1080	14.0	25	16.9	60	0.8	FDG2MK605G332GL5
700	8.0	32.0	33.0	18.0	27.5	\	9.0	480	1440	10.0	25	12.3	60	0.8	FDG2MK805G342GL5
700	10.0	32.0	33.0	18.0	27.5	\	10.0	600	1800	7.0	25	14.3	60	0.8	FDG2MK106G342GL5
700	10.0	32.0	37.0	22.0	27.5	\	12.0	600	1800	6.5	28	10.7	60	0.8	FDG2MK106G402GL5
700	10.0	42.5	18.0	24.0	37.5	\	11.5	350	1050	7.5	30	10.1	35	1.0	FDG2MK106K302KL5
700	12.0	32.0	37.0	22.0	27.5	\	12.5	720	2160	6.0	28	9.2	60	0.8	FDG2MK126G402GL5
700	12.0	42.5	18.0	24.0	37.5	\	12.0	420	1260	7.0	30	9.8	35	1.0	FDG2MK126K302KL5
700	15.0	42.5	33.5	22.0	37.5	\	9.0	525	1575	9.0	30	13.7	35	1.0	FDG2MK156K262KL5
700	15.0	42.5	33.5	22.0	37.5	10.2	10.0	525	1575	8.0	30	12.5	35	1.2	FDG2MK156K264KB5
700	15.0	42.5	40.0	20.0	37.5	10.2	10.0	525	1575	8.0	30	12.5	35	1.2	FDG2MK156K244KB5

# Metallized Polypropylene Film DC-Link Capacitors

## FDG Series - 450 ~ 1200VDC for Harsh Environmental Conditions



### Rating and Part Number

Vdc	Cap Value µF	Dimensions					Irms 10KHz 70°C A	Peak Current A	Surge Current A	ESR 10KHz mΩ	ESL nH	Thermal Res °C/W	dv/dt V/us	Lead Wire mm	Part Number
		W	H	T	P	P1									
		mm	mm	mm	mm	mm									
700	20.0	42.5	37.0	28.0	37.5	10.2	12.0	700	2100	7.5	30	11.6	35	1.2	FDG2MK206K374KB5
700	22.0	42.5	44.0	24.0	37.5	10.2	14.0	770	2310	6.5	30	9.3	35	1.2	FDG2MK226K324KB5
700	25.0	42.5	44.0	24.0	37.5	10.2	16.0	875	2625	6.0	30	7.8	35	1.2	FDG2MK256K324KB5
700	30.0	42.5	45.0	30.0	37.5	20.3	16.0	1050	3150	5.8	30	8.7	35	1.2	FDG2MK306K424KD5
700	30.0	57.5	22.0	43.0	52.5	20.3	12.0	600	1800	8.5	30	9.8	20	1.2	FDG2MK306M304MD5
700	35.0	42.5	50.0	35.0	37.5	20.3	20.0	1225	3675	5.5	30	6.3	35	1.2	FDG2MK356K474KD5
700	40.0	57.5	45.0	30.0	52.5	20.3	14.0	800	2400	5.0	35	8.5	20	1.2	FDG2MK406M164MD5
700	45.0	57.5	45.0	30.0	52.5	20.3	15.5	900	2700	5.0	35	7.6	20	1.2	FDG2MK456M164MD5
700	50.0	57.5	50.0	35.0	52.5	20.3	15.0	1000	3000	4.8	35	8.1	20	1.2	FDG2MK506M204MD5
700	55.0	57.5	50.0	35.0	52.5	20.3	16.0	1100	3300	4.5	35	8.7	20	1.2	FDG2MK556M204MD5
700	60.0	57.5	50.0	35.0	52.5	20.3	18.0	1200	3600	4.0	35	7.7	20	1.2	FDG2MK606M204MD5
700	65.0	57.5	55.0	45.0	52.5	20.3	20.0	1300	3900	4.0	35	6.3	20	1.2	FDG2MK656M324MD5
700	70.0	57.5	55.0	45.0	52.5	20.3	20.0	1400	4200	3.8	35	6.3	20	1.2	FDG2MK706M324MD5
700	75.0	57.5	55.0	45.0	52.5	20.3	20.0	1500	4500	3.8	35	6.3	20	1.2	FDG2MK756M324MD5
700	80.0	57.5	55.0	45.0	52.5	20.3	22.0	1600	4800	3.5	35	5.9	20	1.2	FDG2MK806M324MD5
700	80.0	57.5	60.0	35.0	52.5	20.3	23.0	1600	4800	3.4	35	5.8	20	1.2	FDG2MK806M224MD5
700	90.0	57.5	55.0	45.0	52.5	20.3	24.0	1800	5400	3.5	35	5.0	20	1.2	FDG2MK906M324MD5
700	90.0	57.5	60.0	35.0	52.5	20.3	24.0	1800	5400	3.5	35	5.0	20	1.2	FDG2MK906M224MD5
700	100.0	57.5	65.0	35.0	52.5	20.3	26.0	2000	6000	3.5	35	5.9	20	1.2	FDG2MK107M234MD5
700	110.0	57.5	70.0	35.0	52.5	20.3	28.0	2200	6600	3.4	35	5.8	20	1.2	FDG2MK117M244MD5
700	120.0	57.5	80.0	35.0	52.5	20.3	30.0	2400	7200	3.0	35	5.6	20	1.2	FDG2MK127M254MD5
700	130.0	57.5	65.0	45.0	52.5	20.3	32.0	2600	7800	2.8	35	5.4	20	1.2	FDG2MK137M344MD5
800	1.0	32.0	18.0	9.0	27.5	\	2.0	60	180	62.0	25	45.7	60	0.8	FDG2NK105G152GL5
800	2.0	32.0	20.0	11.0	27.5	\	3.5	120	360	31.0	25	42.5	60	0.8	FDG2NK205G182GL5
800	3.0	32.0	22.0	13.0	27.5	\	4.5	180	540	21.0	25	35.4	60	0.8	FDG2NK305G212GL5
800	3.3	32.0	28.0	14.0	27.5	\	4.0	198	594	25.0	25	32.1	60	0.8	FDG2NK335G262GL5
800	5.0	32.0	28.0	14.0	27.5	\	6.0	300	900	12.0	25	26.5	60	0.8	FDG2NK505G262GL5
800	6.0	32.0	28.0	18.0	27.5	\	7.5	360	1080	10.5	25	18.6	60	0.8	FDG2NK605G332GL5
800	8.0	32.0	33.0	18.0	27.5	\	9.5	480	1440	9.5	25	14.3	60	0.8	FDG2NK805G342GL5
800	9.0	32.0	33.0	18.0	27.5	\	10.0	540	1620	8.5	25	9.1	60	0.8	FDG2NK905G342GL5
800	10.0	32.0	37.0	22.0	27.5	\	11.5	600	1800	9.5	28	8.0	60	0.8	FDG2NK106G402GL5
800	10.0	42.5	32.0	19.0	37.5	\	8.0	350	1050	12.5	30	15.8	35	1.0	FDG2NK106K212KL5
800	15.0	42.5	40.0	20.0	37.5	10.2	10.0	525	1575	8.0	30	12.5	35	1.2	FDG2NK156K244KB5
800	20.0	42.5	37.0	28.0	37.5	10.2	12.0	700	2100	7.0	30	11.6	35	1.2	FDG2NK206K374KB5
800	20.0	42.5	44.0	24.0	37.5	10.2	13.5	700	2100	6.5	30	11.8	35	1.2	FDG2NK206K324KB5
800	22.0	42.5	44.0	24.0	37.5	10.2	14.0	770	2310	6.0	30	9.3	35	1.2	FDG2NK226K324KB5
800	25.0	42.5	45.0	30.0	37.5	20.3	14.0	875	2625	5.5	30	7.5	35	1.2	FDG2NK256K424KD5
800	30.0	42.5	45.0	30.0	37.5	20.3	16.0	1050	3150	4.5	30	8.7	35	1.2	FDG2NK306K424KD5
800	35.0	57.5	45.0	30.0	52.5	20.3	14.2	700	2100	6.5	35	7.6	20	1.2	FDG2NK356M164MD5
800	40.0	57.5	45.0	30.0	52.5	20.3	14.0	800	2400	6.0	35	8.5	20	1.2	FDG2NK406M164MD5
800	45.0	57.5	45.0	30.0	52.5	20.3	15.5	900	2700	5.5	35	7.6	20	1.2	FDG2NK456M164MD5
800	47.0	57.5	50.0	35.0	52.5	20.3	17.5	940	2820	5.0	35	6.5	20	1.2	FDG2NK476M204MD5
800	50.0	57.5	50.0	35.0	52.5	20.3	16.0	1000	3000	5.0	35	7.8	20	1.2	FDG2NK506M204MD5
800	55.0	57.5	50.0	35.0	52.5	20.3	17.0	1100	3300	4.6	35	6.9	20	1.2	FDG2NK556M204MD5
800	65.0	57.5	60.0	35.0	52.5	20.3	19.0	1300	3900	4.0	35	7.3	20	1.2	FDG2NK656M224MD5
800	65.0	57.5	55.0	45.0	52.5	20.3	20.0	1300	3900	4.0	35	6.3	20	1.2	FDG2NK656M324MD5
800	70.0	57.5	55.0	45.0	52.5	20.3	20.0	1400	4200	3.8	35	6.3	20	1.2	FDG2NK706M324MD5
800	70.0	57.5	60.0	35.0	52.5	20.3	20.0	1400	4200	3.8	35	6.3	20	1.2	FDG2NK706M224MD5

# Metallized Polypropylene Film DC-Link Capacitors

## FDG Series - 450 ~ 1200VDC for Harsh Environmental Conditions



### Rating and Part Number

Vdc	Cap Value µF	Dimensions					Irms 10KHz 70°C A	Peak Current A	Surge Current A	ESR 10KHz mΩ	ESL nH	Thermal Res °C/W	dv/dt V/us	Lead Wire mm	Part Number
		W	H	T	P	P1									
		mm	mm	mm	mm	mm									
800	75.0	57.5	55.0	45.0	52.5	20.3	22.0	1500	4500	3.8	35	6.0	20	1.2	FDG2NK756M324MD5
800	75.0	57.5	65.0	35.0	52.5	20.3	22.0	1500	4500	3.8	35	6.0	20	1.2	FDG2NK756M234MD5
800	80.0	57.5	65.0	45.0	52.5	20.3	23.0	1600	4800	3.5	35	5.9	20	1.2	FDG2NK806M344MD5
800	80.0	57.5	70.0	35.0	52.5	20.3	23.0	1600	4800	3.5	35	5.9	20	1.2	FDG2NK806M244MD5
800	90.0	57.5	65.0	45.0	52.5	20.3	25.0	1800	5400	3.3	35	5.0	20	1.2	FDG2NK906M344MD5
800	90.0	57.5	80.0	35.0	52.5	20.3	25.0	1800	5400	3.3	35	5.0	20	1.2	FDG2NK906M254MD5
800	100.0	57.5	65.0	45.0	52.5	20.3	28.0	2000	6000	3.2	35	4.8	20	1.2	FDG2NK107M344MD5
900	1.0	32.0	18.0	9.0	27.5	\	2.0	60	180	63.0	25	46.8	60	0.8	FDG2QK105G152GL5
900	2.0	32.0	20.0	11.0	27.5	\	3.0	120	360	25.0	25	44.4	60	0.8	FDG2QK205G182GL5
900	3.0	32.0	22.0	13.0	27.5	\	5.0	180	540	18.5	25	21.6	60	0.8	FDG2QK305G212GL5
900	3.3	32.0	24.5	15.0	27.5	\	5.0	198	594	18.5	25	21.6	60	0.8	FDG2QK335G272GL5
900	5.0	32.0	28.0	18.0	27.5	\	7.0	300	900	12.5	25	16.3	60	0.8	FDG2QK505G332GL5
900	6.0	32.0	33.0	18.0	27.5	\	8.0	360	1080	11.0	25	14.2	60	0.8	FDG2QK605G342GL5
900	8.0	32.0	37.0	22.0	27.5	\	10.5	480	1440	10.0	28	9.1	60	0.8	FDG2QK805G402GL5
900	10.0	32.0	37.0	22.0	27.5	\	12.0	600	1800	10.0	28	6.9	60	0.8	FDG2QK106G402GL5
900	10.0	42.5	40.0	20.0	37.5	\	8.5	350	1050	12.0	30	11.5	35	1.0	FDG2QK106K242KL5
900	10.0	42.5	40.0	20.0	37.5	10.2	9.5	350	1050	11.5	30	9.6	35	1.2	FDG2QK106K244KB5
900	15.0	42.5	44.0	24.0	37.5	\	10.5	525	1575	8.0	30	11.3	35	1.0	FDG2QK156K322KL5
900	15.0	42.5	44.0	24.0	37.5	10.2	12.0	525	1575	7.5	30	9.3	35	1.2	FDG2QK156K324KB5
900	18.0	42.5	44.0	24.0	37.5	\	10.5	630	1890	8.0	30	11.3	35	1.0	FDG2QK186K322KL5
900	18.0	42.5	44.0	24.0	37.5	10.2	12.0	630	1890	7.5	30	9.3	35	1.2	FDG2QK186K324KB5
900	20.0	42.5	45.0	30.0	37.5	\	14.0	700	2100	6.0	30	8.5	35	1.0	FDG2QK206K422KL5
900	20.0	42.5	45.0	30.0	37.5	20.3	15.0	700	2100	5.5	30	8.1	35	1.2	FDG2QK206K424KD5
900	20.0	57.5	22.0	43.0	52.5	20.3	12.0	400	1200	8.6	30	10.5	20	1.2	FDG2QK206M304MD5
900	25.0	42.5	45.0	30.0	37.5	20.3	17.0	875	2625	5.5	30	6.3	35	1.2	FDG2QK256K424KD5
900	30.0	42.5	50.0	35.0	37.5	20.3	19.0	1200	3600	5.0	30	5.5	40	1.2	FDG2QK306K474KD5
900	30.0	57.5	45.0	30.0	52.5	20.3	15.0	600	1800	5.5	35	8.1	20	1.2	FDG2QK306M164MD5
900	35.0	57.5	50.0	35.0	52.5	20.3	15.5	700	2100	5.5	35	7.6	20	1.2	FDG2QK356M204MD5
900	40.0	57.5	50.0	35.0	52.5	20.3	16.0	800	2400	6.5	35	6.0	20	1.2	FDG2QK406M204MD5
900	50.0	57.5	50.0	35.0	52.5	20.3	18.0	1000	3000	3.6	35	8.6	20	1.2	FDG2QK506M204MD5
900	55.0	57.5	60.0	35.0	52.5	20.3	19.0	1100	3300	3.5	35	7.9	20	1.2	FDG2QK556M224MD5
900	55.0	57.5	55.0	45.0	52.5	20.3	20.0	1100	3300	3.4	35	7.4	20	1.2	FDG2QK556M324MD5
900	60.0	57.5	55.0	45.0	52.5	20.3	20.0	1200	3600	3.4	35	7.4	20	1.2	FDG2QK606M324MD5
900	65.0	57.5	70.0	35.0	52.5	20.3	22.0	1300	3900	3.3	35	7.0	20	1.2	FDG2QK656M244MD5
900	70.0	57.5	55.0	45.0	52.5	20.3	24.0	1400	4200	3.2	35	6.8	20	1.2	FDG2QK706M324MD5
900	70.0	57.5	80.0	35.0	52.5	20.3	24.0	1400	4200	3.2	35	6.8	20	1.2	FDG2QK706M254MD5
900	80.0	57.5	65.0	45.0	52.5	20.3	25.0	1600	4800	3.2	35	6.7	20	1.2	FDG2QK806M344MD5
1000	1.0	32.0	20.0	11.0	27.5	\	2.5	80	240	45.0	25	35.6	80	0.8	FDG3KK105G182GL5
1000	2.0	32.0	22.0	13.0	27.5	\	3.5	160	480	30.0	25	27.2	80	0.8	FDG3KK205G212GL5
1000	3.0	32.0	24.5	15.0	27.5	\	5.0	240	720	25.0	25	16.0	80	0.8	FDG3KK305G272GL5
1000	5.0	32.0	33.0	18.0	27.5	\	8.0	400	1200	14.0	25	11.2	80	0.8	FDG3KK505G342GL5
1000	8.0	32.0	37.0	22.0	27.5	\	10.0	640	1920	12.0	28	8.3	80	0.8	FDG3KK805G402GL5
1000	10.0	42.5	40.0	20.0	37.5	\	8.5	400	1200	12.0	30	11.5	40	1.0	FDG3KK106K242KL5
1000	10.0	42.5	40.0	20.0	37.5	10.2	9.5	400	1200	11.5	30	9.6	40	1.2	FDG3KK106K244KB5
1000	12.0	42.5	44.0	24.0	37.5	10.2	10.5	480	1440	9.0	30	10.1	40	1.2	FDG3KK126K324KB5
1000	15.0	42.5	44.0	24.0	37.5	\	10.5	600	1800	8.0	30	11.3	40	1.0	FDG3KK156K322KL5
1000	15.0	42.5	44.0	24.0	37.5	10.2	12.0	600	1800	7.5	30	9.3	40	1.2	FDG3KK156K324KB5
1000	15.0	42.5	45.0	30.0	37.5	20.3	14.0	600	1800	7.5	30	6.8	40	1.2	FDG3KK156K424KD5

# Metallized Polypropylene Film DC-Link Capacitors

## FDG Series - 450 ~ 1200VDC for Harsh Environmental Conditions



### Rating and Part Number

Vdc	Cap Value µF	Dimensions					Irms 10KHz 70°C A	Peak Current A	Surge Current A	ESR 10KHz mΩ	ESL nH	Thermal Res °C/W	dv/dt V/us	Lead Wire mm	Part Number
		W	H	T	P	P1									
		mm	mm	mm	mm	mm									
1000	15.0	57.5	22.0	43.0	52.5	20.3	12.0	600	1800	8.5	30	7.9	40	1.2	FDG3KK156M304MD5
1000	20.0	42.5	45.0	30.0	37.5	20.3	15.0	800	2400	6.5	30	6.8	40	1.2	FDG3KK206K424KD5
1000	25.0	42.5	50.0	35.0	37.5	20.3	18.0	1000	3000	5.5	30	5.6	40	1.2	FDG3KK256K474KD5
1000	30.0	57.5	45.0	30.0	52.5	20.3	15.0	750	2250	5.5	35	8.1	25	1.2	FDG3KK306M164MD5
1000	35.0	57.5	50.0	35.0	52.5	20.3	16.0	875	2625	5.5	35	7.1	25	1.2	FDG3KK356M204MD5
1000	40.0	57.5	50.0	35.0	52.5	20.3	16.0	1000	3000	5.0	35	7.8	25	1.2	FDG3KK406M204MD5
1000	40.0	57.5	55.0	45.0	52.5	20.3	17.0	1000	3000	5.0	35	7.6	25	1.2	FDG3KK406M324MD5
1000	50.0	57.5	55.0	45.0	52.5	20.3	19.0	1250	3750	4.5	35	6.2	25	1.2	FDG3KK506M324MD5
1000	50.0	57.5	65.0	35.0	52.5	20.3	19.0	1250	3750	4.5	35	6.2	25	1.2	FDG3KK506M234MD5
1000	55.0	57.5	70.0	35.0	52.5	20.3	20.0	1375	4125	4.4	35	6.1	25	1.2	FDG3KK556M244MD5
1000	60.0	57.5	80.0	35.0	52.5	20.3	22.0	1500	4500	4.0	35	5.2	25	1.2	FDG3KK606M254MD5
1000	60.0	57.5	65.0	45.0	52.5	20.3	22.0	1500	4500	4.0	35	5.2	25	1.2	FDG3KK606M344MD5
1100	1.0	32.0	20.0	11.0	27.5	\	2.5	80	240	45.0	25	35.6	80	0.8	FDG3MK105G182GL5
1100	1.5	32.0	22.0	13.0	27.5	\	3.5	120	360	30.0	25	27.2	80	0.8	FDG3MK155G212GL5
1100	2.0	32.0	24.5	15.0	27.5	\	4.0	160	480	25.0	25	25.0	80	0.8	FDG3MK205G272GL5
1100	2.2	32.0	28.0	14.0	27.5	\	5.0	176	528	16.5	25	24.2	80	0.8	FDG3MK225G262GL5
1100	3.3	32.0	28.0	18.0	27.5	\	6.5	264	792	11.5	25	20.6	80	0.8	FDG3MK335G332GL5
1100	4.0	32.0	33.0	18.0	27.5	\	8.0	320	960	10.5	25	14.9	80	0.8	FDG3MK405G342GL5
1100	5.0	32.0	37.0	22.0	27.5	\	8.5	400	1200	9.5	28	14.6	80	0.8	FDG3MK505G402GL5
1100	6.8	42.5	33.5	22.0	37.5	10.2	12.0	272	816	13.5	30	5.1	40	1.2	FDG3MK685K264KB5
1100	8.0	42.5	40.0	20.0	37.5	\	10.5	320	960	14.0	30	6.5	40	1.0	FDG3MK805K242KL5
1100	8.0	42.5	40.0	20.0	37.5	10.2	12.5	320	960	12.5	30	5.1	40	1.2	FDG3MK805K244KB5
1100	8.0	42.5	37.0	22.0	37.5	10.2	12.5	320	960	12.5	30	5.1	40	1.2	FDG3MK805K274KB5
1100	9.0	42.5	37.0	22.0	37.5	10.2	12.8	360	1080	12.2	30	5.0	40	1.2	FDG3MK905K274KB5
1100	10.0	42.5	44.0	24.0	37.5	\	14.0	400	1200	9.0	30	5.7	40	1.0	FDG3MK106K322KL5
1100	10.0	42.5	44.0	24.0	37.5	10.2	15.0	400	1200	8.5	30	5.2	40	1.2	FDG3MK106K324KB5
1100	12.0	42.5	45.0	30.0	37.5	20.3	15.5	480	1440	7.5	30	5.5	40	1.2	FDG3MK126K424KD5
1100	15.0	42.5	45.0	30.0	37.5	20.3	16.0	600	1800	7.0	30	5.4	40	1.2	FDG3MK156K424KD5
1100	18.0	42.5	50.0	35.0	37.5	20.3	15.5	720	2160	7.5	30	5.5	40	1.2	FDG3MK186K474KD5
1100	20.0	42.5	50.0	35.0	37.5	20.3	16.5	800	2400	7.2	35	5.5	40	1.2	FDG3MK206K474KD5
1100	20.0	57.5	45.0	30.0	52.5	20.3	12.0	500	1500	8.5	35	8.2	25	1.2	FDG3MK206M164MD5
1100	25.0	57.5	50.0	35.0	52.5	20.3	13.0	625	1875	8.2	35	8.0	25	1.2	FDG3MK256M204MD5
1100	30.0	57.5	50.0	35.0	52.5	20.3	15.0	750	2250	5.0	35	8.9	25	1.2	FDG3MK306M204MD5
1100	35.0	57.5	60.0	35.0	52.5	20.3	16.0	875	2625	4.9	35	8.7	25	1.2	FDG3MK356M224MD5
1100	40.0	57.5	65.0	35.0	52.5	20.3	17.0	1000	3000	5.5	35	6.3	25	1.2	FDG3MK406M234MD5
1100	40.0	57.5	55.0	45.0	52.5	20.3	17.0	1000	3000	5.5	35	6.3	25	1.2	FDG3MK406M324MD5
1100	45.0	57.5	70.0	35.0	52.5	20.3	18.0	1125	3375	5.4	35	6.2	25	1.2	FDG3MK456M244MD5
1100	50.0	57.5	65.0	45.0	52.5	20.3	19.5	1250	3750	5.2	35	5.8	25	1.2	FDG3MK506M344MD5
1200	1.0	32.0	20.0	11.0	27.5	\	4.5	90	270	32.5	25	15.2	90	0.8	FDG3BK105G182GL5
1200	2.0	32.0	24.5	15.0	27.5	\	5.0	180	540	32.5	25	12.3	90	0.8	FDG3BK205G272GL5
1200	2.2	32.0	28.0	18.0	27.5	\	5.5	198	594	17.0	25	19.4	90	0.8	FDG3BK225G332GL5
1200	3.0	32.0	28.0	18.0	27.5	\	7.0	270	810	16.0	25	12.8	90	0.8	FDG3BK305G332GL5
1200	3.3	32.0	33.0	18.0	27.5	\	8.0	297	891	13.5	25	11.6	90	0.8	FDG3BK335G342GL5
1200	5.0	32.0	37.0	22.0	27.5	\	10.0	450	1350	12.0	28	8.3	90	0.8	FDG3BK505G402GL5
1200	5.0	42.5	33.5	22.0	37.5	\	7.5	225	675	15.5	30	11.5	45	1.0	FDG3BK505K262KL5
1200	6.0	42.5	40.0	20.0	37.5	\	7.5	270	810	15.5	30	11.5	45	1.0	FDG3BK605K242KL5
1200	7.0	42.5	37.0	22.0	37.5	10.2	8.0	315	945	15.2	30	11.0	45	1.2	FDG3BK705K274KB5
1200	8.0	42.5	44.0	24.0	37.5	10.2	9.0	360	1080	12.5	30	9.9	45	1.2	FDG3BK805K324KB5



# Metallized Polypropylene Film DC-Link Capacitors

## FDG Series - 450 ~ 1200VDC for Harsh Environmental Conditions




### Rating and Part Number

Vdc	Cap Value μF	Dimensions					Irms 10KHz 70°C A	Peak Current A	Surge Current A	ESR 10KHz mΩ	ESL nH	Thermal Res °C/W	dv/dt V/us	Lead Wire mm	Part Number
		W	H	T	P	P1									
		mm	mm	mm	mm	mm									
1200	10.0	42.5	44.0	24.0	37.5	10.2	10.0	450	1350	10.5	30	9.5	45	1.2	FDG3BK106K324KB5
1200	10.0	42.5	45.0	30.0	37.5	20.3	12.0	450	1350	8.0	30	8.7	45	1.2	FDG3BK106K424KD5
1200	15.0	42.5	50.0	35.0	37.5	20.3	15.0	675	2025	6.5	30	6.8	45	1.2	FDG3BK156K474KD5
1200	20.0	57.5	45.0	30.0	52.5	20.3	13.0	600	1800	8.5	35	9.7	30	1.2	FDG3BK206M164MD5
1200	25.0	57.5	50.0	35.0	52.5	20.3	15.0	750	2250	6.5	35	9.1	30	1.2	FDG3BK256M204MD5
1200	30.0	57.5	55.0	45.0	52.5	20.3	17.0	900	2700	5.5	35	8.1	30	1.2	FDG3BK306M324MD5
1200	30.0	57.5	60.0	35.0	52.5	20.3	17.0	900	2700	5.5	35	8.1	30	1.2	FDG3BK306M224MD5
1200	35.0	57.5	55.0	45.0	52.5	20.3	18.0	1050	3150	5.0	35	6.9	30	1.2	FDG3BK356M324MD5
1200	35.0	57.5	70.0	35.0	52.5	20.3	18.0	1050	3150	5.0	35	6.9	30	1.2	FDG3BK356M244MD5
1200	40.0	57.5	65.0	45.0	52.5	20.3	20.0	1200	3600	4.5	35	5.6	30	1.2	FDG3BK406M344MD5
1200	45.0	57.5	65.0	45.0	52.5	20.3	22.0	1350	4050	4.3	35	5.5	30	1.2	FDG3BK456M344MD5

**General Technical Data**

Applications	DC Link / DC Filtering
Dielectric	Metallized Polypropylene Film
Reference Standard	IEC 61071/EN 61071
Climatic Category	40/105/56 IEC 60068-1
Operating Temperature Range	-40°C ~ +105°C (85°C ~105°C, decreasing factor 1.25% per °C for Rated Voltage)
Protection	Solvent resistant plastic case UL94 V-0 Thermosetting resin sealing UL 94 V-0 compliant
Installation	Any position
Packaging	Packed in cardboard boxes with protection for the terminals
Storage Conditions	Storage time: ≤24months from the date marked on the label package Average relative humidity per year ≤70% RH≤85% for 30 days randomly distributed throughout the year Dew is absent Temperature: -40°C ~ +85°C
Storage Life	Product that passed less than 2 years from production, No need reconfirmation
RoHS Compliance	Compliant with the restricted substance requirement of Directive 2011/65/EU
Flame Retardant Grade	Flame retardant performance accords with horizontal combustion grade HB and vertical combustion grade V-0.
Application note and limiting conditions	These capacitors are designed only for DC voltage so should not be used for AC line. The continuous peak voltage shall not exceed the rated DC voltage rating

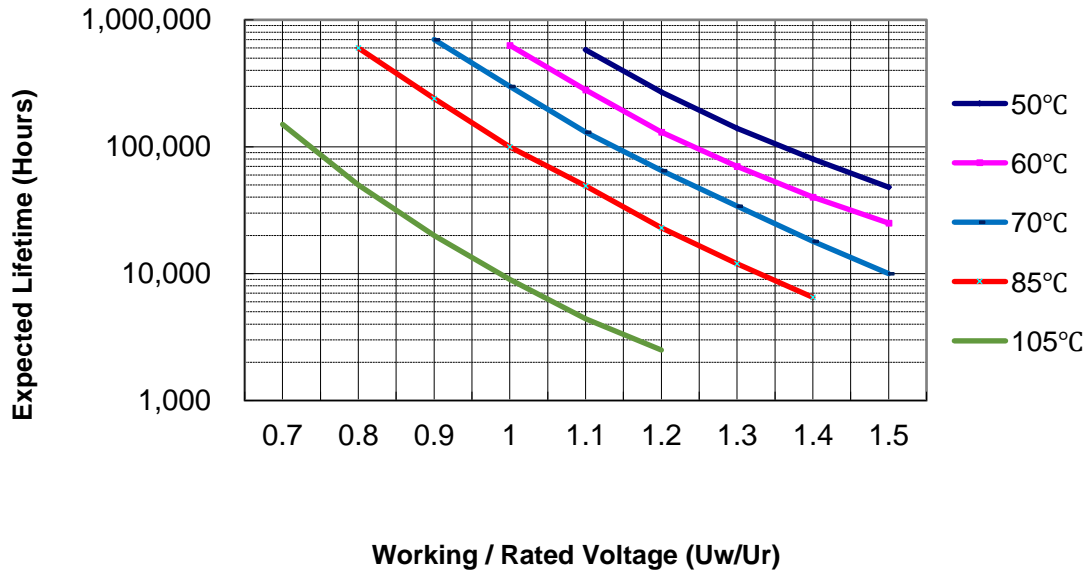
**Construction**

Metallized Film	OPP & Al/Zn
Metal Sprayed	Sn/Zn Alloy
Connection Electrode	Tinned copper wires
Case	Plastic Case (UL94V-0)
Filling	Epoxy Resin (UL94V-0)
Film Construction	<p>Mono Structure</p> 

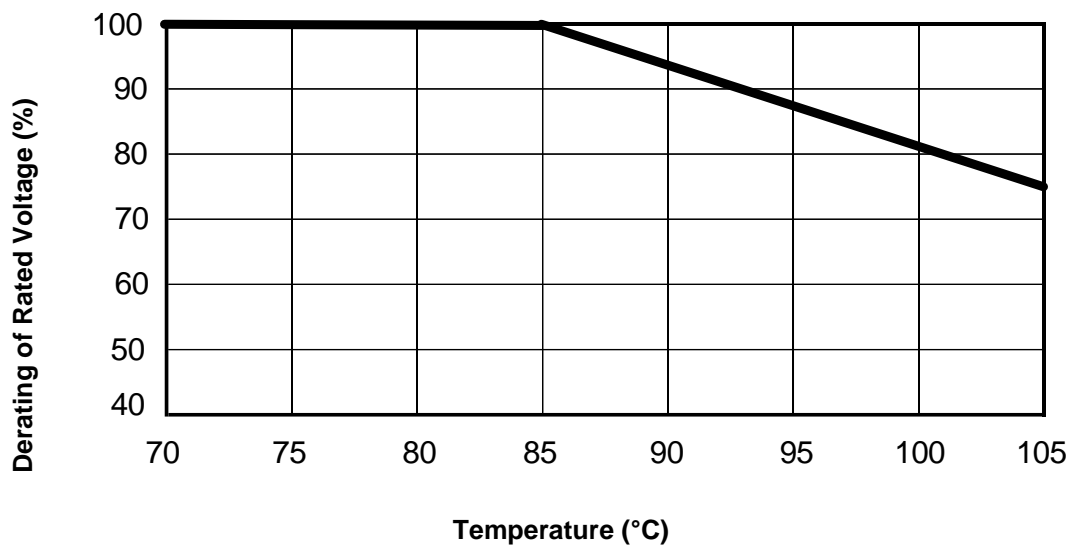
**Electrical Characteristics**

Voltage Range	450Vdc ~ 1200Vdc
Capacitance Range	1.0μF ~ 170μF
Capacitance Tolerance	±5% or ±10% at +25°C
Capacitance	Measuring Frequency at 1kHz Measuring Voltage: 1±0.2V
Standard Atmospheric Conditions for Static Test	<b>Ambient temperature</b> 15°C to 35°C (If there is any doubt on the results, the measurements shall be made at +20 +/- 5°C) <b>Relative humidity</b> 45% to 75% (If there is any doubt on the results, the measurements shall be made at 60% to 70 %.) <b>Air pressure</b> 86 kPa to 106 kPa.
Voltage Between Terminals U <sub>TT</sub>	1.5 x V <sub>R</sub> VDC for 10 seconds (between terminations) @ +25°C ±5°C
Voltage Between Terminals and Case U <sub>TC</sub>	3000V <sub>AC</sub> , 50/60Hz 60s (at +25 +/-5°C)
Dielectric Dissipation Factor Tgδ 0	≤2×10 <sup>-4</sup>
Dissipation factor	≤0.002 (0.2%) at 1KHz; C ≤20μF at 25°C ≤0.003 (0.3%) at 1KHz; C >20μF at 25°C
Insulation Resistance	RC between leads, IR xC≥30,000 s at 100vdc 1minute at +25°C
Self-Inductance	<1nH per mm of lead spacing
Hot-Spot	≤85°C
Life Expectancy	100,000 hours (UR, Θhotspot=85°C)
Failure Rate	100 Fit
Max. Altitude	2000 m
<b>Overvoltage</b>	<b>Maximum duration within one day</b>
Apply 110% of rated voltage	30% of on-load duration
Apply 115% of rated voltage	30 mins
Apply 120% of rated voltage	5 mins
Apply 130% of rated voltage	1 min

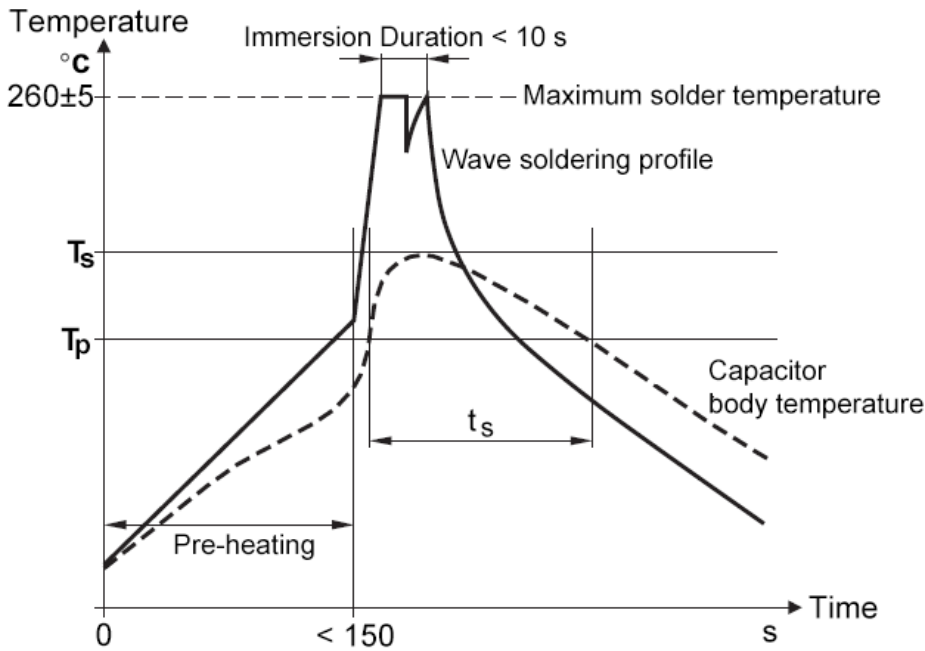
**Expected Life Curve**



**Derating of Rated Voltage Vs Temperature**



**Wave Soldering Recommendations**

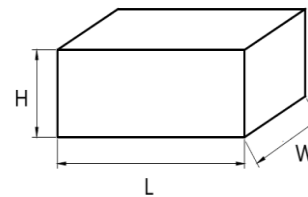


$T_s$ : Capacitor body maximum temperature at wave soldering  
 $T_p$ : Capacitor body maximum temperature at pre-heating

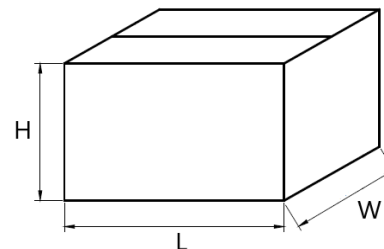
Polypropylene Capacitors	Polyester Capacitors
During pre-heating: $T_p \leq 110^\circ\text{C}$ During soldering: $T_s \leq 120^\circ\text{C}$ , $t_s \leq 60$	During pre-heating: $T_p \leq 130^\circ\text{C}$ During soldering: $T_s \leq 160^\circ\text{C}$ , $t_s \leq 60\text{s}$

**Packaging Information**

Inner Box Specifications (Dimensions)			
Box #	L ±3mm	W±3mm	H ±3mm
# 1	331	331	25
# 2	331	331	35
# 3	331	331	50
# 4	331	331	80
# 5	350	170	35
# 6	350	170	50
# 7	350	170	80



Outer Box Specifications (Dimensions)			
Box #	L ±5mm	W±5mm	H ±5mm
# 1	350	340	265
# 2	370	360	350



**Packaging Quantity**

Pitch	Code	W	H	T	Long Leads	Short Leads
27.5	G15	32.0	18.0	9.0	200	306
	G18	32.0	20.0	11.0	200	252
	G21	32.0	22.0	13.0	200	207
	G26	32.0	28.0	14.0	200	198
	G27	32.0	24.5	15.0	200	180
	G33	32.0	28.0	18.0	100	153
	G34	32.0	33.0	18.0	100	153
37.5	G40	32.0	37.0	22.0	100	126
	K21	42.5	32.0	19.0	-	112
	K24	42.5	40.0	20.0	-	105
	K26	42.5	33.5	22.0	-	98
	K27	42.5	37.0	22.0	-	98
	K30	42.5	18.0	24.0	-	91
	K32	42.5	44.0	24.0	-	91
	K37	42.5	37.0	28.0	-	77
52.5	K42	42.5	45.0	30.0	-	70
	K47	42.5	50.0	35.0	-	63
	M16	57.5	45.0	30.0	-	50
	M20	57.5	50.0	35.0	-	45
	M22	57.5	60.0	35.0	-	45
	M23	57.5	65.0	35.0	-	45
	M24	57.5	70.0	35.0	-	45
	M25	57.5	80.0	35.0	-	45
	M30	57.5	22.0	43.0	-	35
	M32	57.5	55.0	45.0	-	35
M34	57.5	65.0	45.0	-	35	
M35	57.5	53.0	50.0	-	30	

**Cautions and Warnings**

- Don't exceed the upper category temperature.
- For longtime storage, maximum relative humidity 80%, no dew allowed on the capacitor.
- Do not use or store capacitor in corrosive atmosphere, in the dusty environment's regular maintenance and cleaning especially of the terminals is required to avoid conductive path between terminal / or terminal and ground.
- Don't apply any mechanical stress to the capacitor terminals, and avoid any compressive, tensile or flexural stress.
- Don't move the capacitor after fixed to the PC board, and don't pick up the PC board by the fixed capacitor.
- Don't place the capacitor on a PC board whose holes pitch differs from the specified space.
- Avoid overload of the capacitors
- Do not have unlimited service life expectancy, the max service life expectancy may vary depending on the application the capacitor is used in.

### Disclaimer

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