

## APPLICATIONS

DC voltage filtering for all types of application

## PACKAGING

Rectangular non-magnetic stainless steel case.  
Grounding is via a nut on the top of the case.

## PRESENTATION



## ELECTRICAL CHARACTERISTICS

Capacitance range $C_n$	88 $\mu$ F to 1620 $\mu$ F
Tolerance on $C_n$	$\pm$ 10%
Nominal DC voltage range	1200V to 3900V
Operating hot-spot temperature range	-55°C to 85°C
Lifetime at $V_n$ and 70°C hot-spot temperature	100,000 hours
Stray inductance	<400nH
Maximum Rms current	see table of values
Test voltage between terminals	1.5 $V_n$ during 10s
Test voltage between shorten terminals and case	6kV <sub>rms</sub> at 50Hz during 10s

# CAPAFIM Products

## Table of Values

4 sizes and 12 voltages available according to following tables

millimeters (inches)

Type	Length	Width	Height
<b>A</b>	166 (6.535)	70 (2.756)	210 (8.268)
<b>B</b>	166 (6.535)	102 (4.016)	210 (8.268)
<b>C</b>	166 (6.535)	134 (5.276)	210 (8.268)
<b>D</b>	166 (6.535)	166 (6.535)	210 (8.268)

Type	$V_n = 1200 \text{ to } 1400\text{V}$				$V_n = 1800\text{V}$			
	C ( $\mu\text{F}$ )	$R_s$ ( $\text{m}\Omega$ )	$I_{\text{rms max}}$ (A)	Part Number	C ( $\mu\text{F}$ )	$R_s$ ( $\text{m}\Omega$ )	$I_{\text{rms max}}$ (A)	Part Number
A	<b>650</b>	3.48	56	DNCFM1K4A0657	<b>426</b>	4.35	46	DNCFM1K8A4266
B	<b>975</b>	2.6	84	DNCFM1K4B9756	<b>639</b>	3.17	69	DNCFM1K8B6396
C	<b>1300</b>	1.99	112	DNCFM1K4C1307	<b>852</b>	2.43	92	DNCFM1K8C8526
D	<b>1620</b>	1.74	140	DNCFM1K4D1627	<b>1060</b>	2.09	115	DNCFM1K8D1067

Type	$V_n = 2000\text{V}$				$V_n = 2200\text{V}$			
	C ( $\mu\text{F}$ )	$R_s$ ( $\text{m}\Omega$ )	$I_{\text{rms max}}$ (A)	Part Number	C ( $\mu\text{F}$ )	$R_s$ ( $\text{m}\Omega$ )	$I_{\text{rms max}}$ (A)	Part Number
A	<b>338</b>	5.33	40	DNCFM2K0A3386	<b>288</b>	5.66	36	DNCFM2K2A2886
B	<b>507</b>	3.49	60	DNCFM2K0B5076	<b>432</b>	3.71	54	DNCFM2K2B4326
C	<b>676</b>	2.83	80	DNCFM2K0C6766	<b>576</b>	3	72	DNCFM2K2C5766
D	<b>845</b>	2.28	100	DNCFM2K0D8456	<b>720</b>	2.41	90	DNCFM2K2D0727

Type	$V_n = 2400\text{V}$				$V_n = 2600\text{V}$			
	C ( $\mu\text{F}$ )	$R_s$ ( $\text{m}\Omega$ )	$I_{\text{rms max}}$ (A)	Part Number	C ( $\mu\text{F}$ )	$R_s$ ( $\text{m}\Omega$ )	$I_{\text{rms max}}$ (A)	Part Number
A	<b>228</b>	6.14	32	DNCFM2K4A2286	<b>192</b>	6.49	30	DNCFM2K6A1926
B	<b>342</b>	4.03	48	DNCFM2K4B3426	<b>288</b>	4.77	45	DNCFM2K6B2886
C	<b>456</b>	3.24	64	DNCFM2K4C4566	<b>384</b>	3.41	60	DNCFM2K6C3846
D	<b>570</b>	2.77	80	DNCFM2K4D0577	<b>480</b>	2.91	75	DNCFM2K6D0487

Type	$V_n = 2900\text{V}$				$V_n = 3100\text{V}$			
	C ( $\mu\text{F}$ )	$R_s$ ( $\text{m}\Omega$ )	$I_{\text{rms max}}$ (A)	Part Number	C ( $\mu\text{F}$ )	$R_s$ ( $\text{m}\Omega$ )	$I_{\text{rms max}}$ (A)	Part Number
A	<b>162</b>	6.83	28	DNCFM2K9A1626	<b>144</b>	7.08	26	DNCFM3K1A1446
B	<b>243</b>	5	42	DNCFM2K9B2436	<b>216</b>	5.16	39	DNCFM3K1B2166
C	<b>324</b>	3.58	56	DNCFM2K9C3246	<b>288</b>	3.71	52	DNCFM3K1C2886
D	<b>405</b>	3.05	70	DNCFM2K9D4056	<b>360</b>	3.15	65	DNCFM3K1D0367

# CAPAFIM Products

## Table of Values

Type	$V_n = 3300V$				$V_n = 3500V$			
	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	$I_{rms}$ max (A)	Part Number	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	$I_{rms}$ max (A)	Part Number
A	<b>126</b>	7.35	24	DNCFM3K3A1266	<b>112</b>	7.59	22	DNCFM3K5A1126
B	<b>189</b>	5.34	36	DNCFM3K3B1896	<b>168</b>	5.51	33	DNCFM3K5B1686
C	<b>252</b>	3.84	48	DNCFM3K3C2526	<b>224</b>	4.47	44	DNCFM3K5C2246
D	<b>315</b>	3.25	60	DNCFM3K3D3156	<b>280</b>	3.35	55	DNCFM3K5D0287

Type	$V_n = 3700V$				$V_n = 3900V$			
	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	$I_{rms}$ max (A)	Part Number	C ( $\mu F$ )	$R_s$ ( $m\Omega$ )	$I_{rms}$ max (A)	Part Number
A	<b>100</b>	7.83	20	DNCFM3K7A0107	<b>88</b>	8.1	18	DNCFM3K9A0886
B	<b>150</b>	5.67	30	DNCFM3K7B0157	<b>132</b>	5.98	27	DNCFM3K9B1326
C	<b>200</b>	4.59	40	DNCFM3K7C0207	<b>176</b>	4.72	36	DNCFM3K9C1766
D	<b>250</b>	3.45	50	DNCFM3K7D0257	<b>220</b>	4.06	45	DNCFM3K9D0227

## THERMAL RESISTANCES

**Rth1:** Between hot spot and case

**Rth2:** Between case and ambient air vs convection

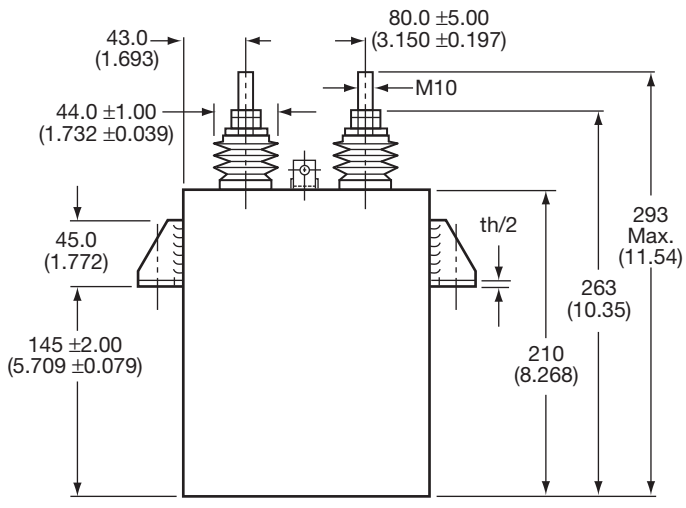
Width millimeters (inches)	Rth1 ( $^{\circ}C/W$ )	Rth2 ( $^{\circ}C/W$ ) Natural convection	Rth2 ( $^{\circ}C/W$ ) Forced air (velocity > 2m/s)
70 (2.756)	0.72	0.72	0.36
102 (4.016)	0.62	0.62	0.31
134 (5.276)	0.54	0.54	0.27
166 (6.535)	0.48	0.48	0.24

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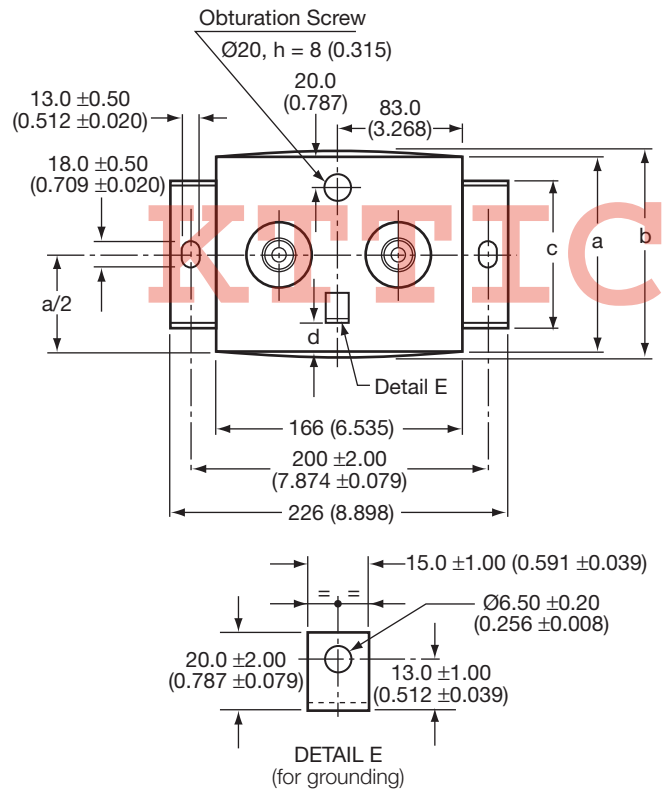
# CAPAFIM Products

## Mechanical Design

millimeters (inches)



**Terminals**  
 Creepage distance  
 77 (3.031)  
 Air distance  
 40 (1.575)



Type	a	b	c	d	Weight (kg)
A	70 (2.756)	85 (3.346)	50 (1.969)	10 (0.394)	4.5
B	102 (4.016)	117 (4.606)	50 (1.969)	10 (0.394)	6
C	134 (5.276)	149 (5.866)	100 (3.937)	20 (0.787)	7.5
D	166 (6.535)	181 (7.126)	100 (3.937)	20 (0.787)	9