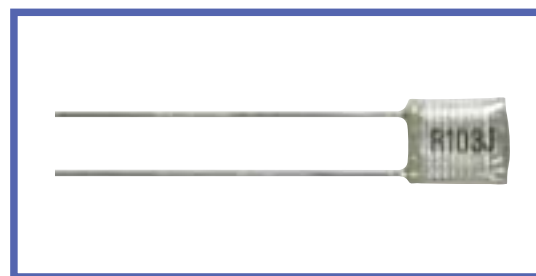


F2D SERIES

◆FEATURES

- Small and light.
- Thin coating makes it suitable for automatic insertion.
- RoHS compliance.

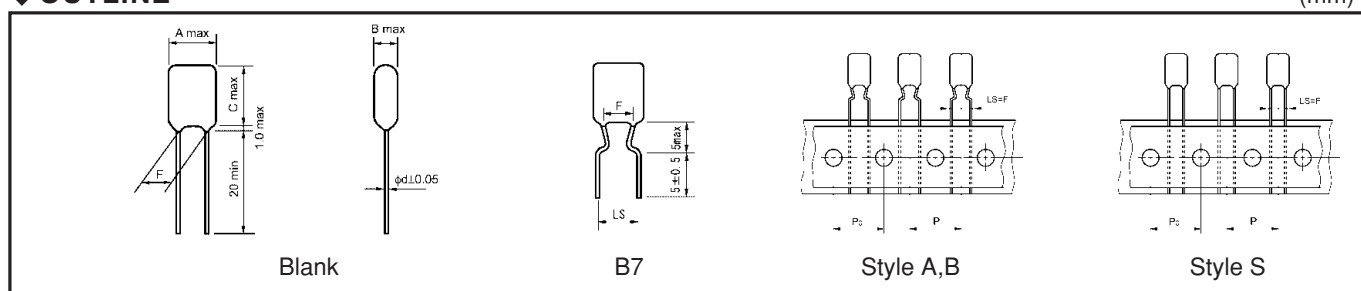


◆SPECIFICATIONS

Category temperature	$-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$ (Derate the voltage as shown in the Fig2 at P239 when using the capacitor beyond 85°C .)
Rated voltage (U_R)	50VDC, 100VDC, 200VDC
Capacitance tolerance	$\pm 5\%$ (J), $\pm 10\%$ (K)
$\tan \delta$	0.01max at 1kHz
Voltage proof	$U_R \times 200\%$ 60s
Insulation resistance	30000M Ω min
Reference standard	JIS C 5101-11, JIS C 5101-1

◆OUTLINE

(mm)



◆PART NUMBER

F2D

Tolerance

Sub mark

Suffix

Rated Voltage
Series
Rated capacitance

↓

Symbol	U_R
50	50VDC
100	100VDC
200	200VDC

↓

Symbol	Tolerance
J	$\pm 5\%$
K	$\pm 10\%$

↓

Symbol	Lead style
Blank	Long lead type
B7	Lead forming cut LS=5.0
TV	Style A, Ammo pack P=12.7 Po=12.7 LS=5.0
TF	Style B, Ammo pack P=15.0 Po=15.0 LS=5.0
TS	Style S, Ammo pack P=12.7 Po=12.7

◆ DIMENSIONS AND QUANTITY
◆ RATED VOLTAGE:50VDC

Part No.	cap (μF)	Dimensions (mm)						Typical Packaging Quantity (pcs)						
								Long Lead type		Taping Ammo pack type - style				
		A	B	C	F ±0.5	LS ±0.5	d	Bag	Carton	A TV	B, D TF	C —	E —	S TS
50F2D471	0.00047	5.5	3.0	7.0	3.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
50F2D561	0.00056	5.5	3.0	7.0	3.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
50F2D681	0.00068	5.5	3.0	7.0	3.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
50F2D821	0.00082	5.5	3.0	7.0	3.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
50F2D102	0.001	5.0	2.5	7.0	3.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
50F2D122	0.0012	5.0	2.5	7.0	3.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
50F2D152	0.0015	5.5	2.5	7.0	3.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
50F2D182	0.0018	5.5	2.5	7.0	3.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
50F2D222	0.0022	5.5	3.0	7.0	3.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
50F2D272	0.0027	5.5	3.0	7.0	3.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
50F2D332	0.0033	5.5	3.0	7.0	3.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
50F2D392	0.0039	5.5	3.0	7.0	3.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
50F2D472	0.0047	5.5	3.0	7.0	3.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
50F2D562	0.0056	5.5	3.0	7.0	3.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
50F2D682	0.0068	5.5	3.0	7.0	3.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
50F2D822	0.0082	5.5	3.0	7.0	3.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
50F2D103	0.01	5.5	3.0	7.0	3.5	5.0	0.5	200	8,000	2,500	—	—	—	2,500
50F2D123	0.012	6.0	3.0	7.0	3.5	5.0	0.5	200	8,000	2,500	—	—	—	2,500
50F2D153	0.015	6.0	3.0	8.5	3.5	5.0	0.5	200	8,000	2,500	—	—	—	2,500
50F2D183	0.018	6.0	3.0	8.5	3.5	5.0	0.5	200	8,000	2,500	—	—	—	2,500
50F2D223	0.022	6.5	3.5	9.0	3.5	5.0	0.5	200	8,000	2,500	—	—	—	2,500
50F2D273	0.027	6.5	3.5	9.0	3.5	5.0	0.5	200	5,000	2,500	—	—	—	2,500
50F2D333	0.033	6.5	3.5	9.0	3.5	5.0	0.5	200	5,000	2,000	—	—	—	2,000
50F2D393	0.039	7.5	3.5	9.0	5.0	5.0	0.5	200	5,000	2,000	—	—	—	2,000
50F2D473	0.047	7.5	4.0	9.5	5.0	5.0	0.5	200	4,000	2,000	—	—	—	2,000
50F2D563	0.056	7.5	4.0	10.0	5.0	5.0	0.5	200	4,000	2,000	—	—	—	2,000
50F2D683	0.068	8.0	4.5	10.0	5.0	5.0	0.5	200	4,000	1,500	—	—	—	1,500
50F2D823	0.082	8.0	4.5	10.5	5.0	5.0	0.5	200	3,000	1,500	—	—	—	1,500
50F2D104	0.1	8.5	5.5	10.5	5.0	5.0	0.5	200	3,000	1,500	—	—	—	1,500
50F2D124	0.12	8.5	5.5	11.5	5.0	5.0	0.5	200	3,000	1,500	—	—	—	1,500
50F2D154	0.15	9.0	6.0	11.5	5.0	5.0	0.5	200	2,000	1,000	—	—	—	1,000
50F2D184	0.18	10.0	6.5	11.5	7.5	5.0	0.5	200	2,000	1,000	—	—	—	1,000
50F2D224	0.22	10.5	7.0	12.0	7.5	5.0	0.5	200	2,000	1,000	—	—	—	1,000
50F2D274	0.27	11.0	6.5	14.0	7.5	5.0	0.6	200	2,000	—	1,000	—	—	—
50F2D334	0.33	11.5	7.0	14.0	7.5	5.0	0.6	100	1,500	—	1,000	—	—	—
50F2D394	0.39	12.5	7.5	14.5	7.5	5.0	0.6	100	1,000	—	500	—	—	—
50F2D474	0.47	13.0	8.5	14.5	7.5	5.0	0.6	100	1,000	—	500	—	—	—

□ : Tolerance (J: ± 5%, K: ± 10%) ** : Suffix

◆ RATED VOLTAGE:100VDC

Part No.	cap (μF)	Dimensions (mm)						Typical Packaging Quantity (pcs)						
								Long Lead type		Taping Ammo pack type - style				
		A	B	C	F	LS ±0.5	d	Bag	Carton	A TV	B, D TF	C —	E —	S TS
100F2D471	0.00047	5.5	3.0	7.0	3.5 ± 0.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
100F2D561	0.00056	5.5	3.0	7.0	3.5 ± 0.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
100F2D681	0.00068	5.5	3.0	7.0	3.5 ± 0.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
100F2D821	0.00082	5.5	3.0	7.0	3.5 ± 0.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
100F2D102	0.001	5.0	2.5	7.0	3.5 ± 0.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
100F2D122	0.0012	5.0	2.5	7.0	3.5 ± 0.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
100F2D152	0.0015	5.5	2.5	7.0	3.5 ± 0.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
100F2D182	0.0018	5.5	2.5	7.0	3.5 ± 0.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
100F2D222	0.0022	5.5	3.0	7.0	3.5 ± 0.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
100F2D272	0.0027	5.5	3.0	7.0	3.5 ± 0.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
100F2D332	0.0033	5.5	3.0	7.0	3.5 ± 0.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
100F2D392	0.0039	5.5	3.0	7.0	3.5 ± 0.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
100F2D472	0.0047	5.5	3.0	7.0	3.5 ± 0.5	5.0	0.5	200	10,000	2,000	—	—	—	2,000
100F2D562	0.0056	5.5	3.0	7.0	3.5 ± 0.5	5.0	0.5	200	10,000	2,000	—	—	—	2,000
100F2D682	0.0068	6.5	3.0	9.5	5.0 ± 1.0	5.0	0.5	200	8,000	2,000	—	—	—	2,000
100F2D822	0.0082	6.5	3.0	9.5	5.0 ± 1.0	5.0	0.5	200	8,000	2,000	—	—	—	2,000
100F2D103	0.01	6.5	3.5	9.5	5.0 ± 1.0	5.0	0.5	200	5,000	2,000	—	—	—	2,000
100F2D123	0.012	7.0	3.5	10.0	5.0 ± 1.0	5.0	0.5	200	5,000	2,000	—	—	—	2,000
100F2D153	0.015	7.0	3.5	10.0	5.0 ± 1.0	5.0	0.5	200	5,000	2,000	—	—	—	2,000
100F2D183	0.018	8.0	3.5	10.0	5.0 ± 1.0	5.0	0.5	200	4,000	2,000	—	—	—	2,000
100F2D223	0.022	8.0	4.0	12.0	5.0 ± 1.0	5.0	0.5	200	4,000	2,000	—	—	—	2,000
100F2D273	0.027	8.0	4.0	12.0	5.0 ± 1.0	5.0	0.5	200	4,000	2,000	—	—	—	2,000
100F2D333	0.033	8.0	4.0	12.0	5.0 ± 1.0	5.0	0.5	200	4,000	2,000	—	—	—	2,000
100F2D393	0.039	8.0	4.5	12.0	5.0 ± 1.0	5.0	0.5	200	3,000	2,000	—	—	—	2,000
100F2D473	0.047	9.0	4.5	13.0	5.0 ± 1.0	5.0	0.5	200	3,000	1,000	—	—	—	1,000
100F2D563	0.056	9.0	5.5	13.0	5.0 ± 1.0	5.0	0.5	200	3,000	1,000	—	—	—	1,000
100F2D683	0.068	9.0	5.5	13.0	5.0 ± 1.0	5.0	0.5	200	3,000	1,000	—	—	—	1,000
100F2D823	0.082	9.5	6.0	13.0	7.5 ± 1.5	5.0	0.5	200	2,000	1,000	—	—	—	1,000
100F2D104	0.1	10.0	6.0	13.0	7.5 ± 1.5	5.0	0.5	200	2,000	1,000	—	—	—	1,000
100F2D124	0.12	10.5	6.0	15.0	7.5 ± 1.5	5.0	0.6	200	2,000	1,000	—	—	—	1,000
100F2D154	0.15	11.5	7.0	15.0	7.5 ± 1.5	5.0	0.6	100	1,000	—	500	—	—	—
100F2D184	0.18	12.0	7.0	15.0	7.5 ± 1.5	5.0	0.6	100	1,000	—	500	—	—	—
100F2D224	0.22	13.0	8.0	15.0	7.5 ± 1.5	5.0	0.6	100	1,000	—	500	—	—	—

□ : Tolerance (J: ± 5%, K: ± 10%) ** : Suffix

◆ RATED VOLTAGE : 200VDC

Part No.	cap (μF)	Dimensions (mm)						Typical Packaging Quantity (pcs)						
								Long Lead type		Taping Ammo pack type - style				
		A	B	C	F	LS ±0.5	d	Bag	Carton	A TV	B, D TF	C	E	S TS
200F2D471□**	0.00047	5.5	3.0	7.0	3.5±0.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
200F2D561□**	0.00056	5.5	3.0	7.0	3.5±0.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
200F2D681□**	0.00068	5.5	3.0	7.0	3.5±0.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
200F2D821□**	0.00082	5.5	3.0	7.0	3.5±0.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
200F2D102□**	0.001	6.0	3.0	7.5	3.5±1.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
200F2D122□**	0.0012	6.0	3.0	7.5	3.5±1.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
200F2D152□**	0.0015	6.0	3.0	7.5	3.5±1.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
200F2D182□**	0.0018	6.0	3.0	7.5	3.5±1.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
200F2D222□**	0.0022	6.0	3.0	7.5	3.5±1.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
200F2D272□**	0.0027	6.5	3.5	7.5	3.5±1.5	5.0	0.5	200	10,000	3,000	—	—	—	3,000
200F2D332□**	0.0033	6.5	3.5	9.5	3.5±1.5	5.0	0.5	200	10,000	2,000	—	—	—	2,000
200F2D392□**	0.0039	6.5	3.5	9.5	5.0±1.5	5.0	0.5	200	8,000	2,000	—	—	—	2,000
200F2D472□**	0.0047	7.0	3.5	9.5	5.0±1.5	5.0	0.5	200	8,000	2,000	—	—	—	2,000
200F2D562□**	0.0056	7.0	4.0	9.5	5.0±1.5	5.0	0.5	200	5,000	2,000	—	—	—	2,000
200F2D682□**	0.0068	7.0	4.0	9.5	5.0±1.5	5.0	0.5	200	5,000	2,000	—	—	—	2,000
200F2D822□**	0.0082	7.0	4.0	12.0	5.0±1.5	5.0	0.5	200	5,000	2,000	—	—	—	2,000
200F2D103□**	0.01	7.5	4.0	12.0	5.0±1.5	5.0	0.5	200	4,000	2,000	—	—	—	2,000
200F2D123□**	0.012	8.0	4.0	12.0	5.0±1.5	5.0	0.5	200	4,000	1,000	—	—	—	1,000
200F2D153□**	0.015	8.0	4.5	12.0	5.0±1.5	5.0	0.5	200	4,000	1,000	—	—	—	1,000
200F2D183□**	0.018	8.0	4.5	12.0	5.0±1.5	5.0	0.5	200	4,000	1,000	—	—	—	1,000
200F2D223□**	0.022	9.0	5.0	13.0	5.0±1.5	5.0	0.5	200	3,000	1,000	—	—	—	1,000
200F2D273□**	0.027	9.5	5.5	13.0	5.0±1.5	5.0	0.5	200	3,000	1,000	—	—	—	1,000
200F2D333□**	0.033	9.5	6.0	13.0	5.0±1.5	5.0	0.5	200	3,000	1,000	—	—	—	1,000
200F2D393□**	0.039	10.0	6.0	15.0	7.5±1.5	5.0	0.5	200	3,000	750	—	—	—	750
200F2D473□**	0.047	10.5	6.0	15.0	7.5±1.5	5.0	0.5	200	2,000	750	—	—	—	750
200F2D563□**	0.056	11.0	6.5	15.0	7.5±1.5	5.0	0.5	100	2,000	—	500	—	—	—
200F2D683□**	0.068	11.5	7.0	15.0	7.5±1.5	5.0	0.6	100	2,000	—	500	—	—	—
200F2D823□**	0.082	11.5	7.0	18.0	7.5±1.5	5.0	0.6	100	2,000	—	500	—	—	—
200F2D104□**	0.1	12.0	7.5	18.0	7.5±1.5	5.0	0.6	100	1,000	—	500	—	—	—
200F2D124□**	0.12	13.5	7.5	20.0	10.0±2.0	5.0	0.6	100	1,000	—	—	—	—	—
200F2D154□**	0.15	14.0	8.0	20.0	10.0±2.0	5.0	0.6	100	800	—	—	—	—	—
200F2D184□**	0.18	15.0	8.5	20.0	10.0±2.0	5.0	0.6	100	600	—	—	—	—	—
200F2D224□**	0.22	16.0	10.0	20.0	10.0±2.0	5.0	0.6	100	600	—	—	—	—	—

□ : Tolerance (J: ± 5%, K: ± 10%) ** : Suffix