



**THE DATASHEET OF  
SFBDT2000103MX0**





**Electrical Details**

Electrical Configuration	C Filter	
Capacitance Measurement	@ 1000hr Point	
Current Rating	10A	
Insulation Resistance (IR)	10GΩ or 1000ΩF	
Temperature Rating	-55°C to +125°C	
Ferrite Inductance (Typical)	Not Applicable	

**Mechanical Details**

Body Flange Diameter	6.35mm (0.250")
Head (A/F)	4.75mm (0.187")
Nut A/F	7.92mm (0.312")
Washer diameter	9.40mm (0.370")
Mounting Torque	0.6Nm (5.31bf in) max. if using nut 0.3Nm (2.65bf in) max. into tapped hole
Mounting Hole Diameter	5.7mm ±0.1 (0.224" ±0.004")
Max. Panel Thickness	4.9mm (0.193")
Weight (Typical)	1.5g (0.05oz)
Finish	Silver plate on copper undercoat

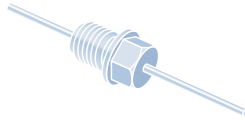
Product Code	Capacitance (±20%) UOS	Dielectric	Rated Voltage (Vdc)	DWV (Vdc)	Typical No-Load Insertion Loss (dB)							
					0.01MHz	0.1MHz	1MHz	10MHz	100MHz	1GHz		
*SFBDC5000100ZC	10pF -20% / +80%	COG/NPO	500#	750	-	-	-	-	-	4		
SFBDC5000150ZC	15pF -20% / +80%				-	-	-	-	-	7		
SFBDC5000220ZC	22pF -20% / +80%				-	-	-	-	-	10		
SFBDC5000330ZC	33pF -20% / +80%				-	-	-	-	-	12		
*SFBDC5000470ZC	47pF -20% / +80%				-	-	-	-	1	15		
*SFBDC5000680MC	68pF				-	-	-	-	2	18		
*SFBDC5000101MC	100pF				-	-	-	-	4	22		
SFBDC5000151MC	150pF				-	-	-	-	7	25		
*SFBDC5000221MC	220pF				-	-	-	-	10	29		
*SFBDC5000331MC	330pF				-	-	-	-	13	33		
*SFBDC5000471MX	470pF	†X7R			200	500	-	-	-	1	16	35
SFBDC5000681MX	680pF	-					-	-	2	19	36	
*SFBDC5000102MX	1.0nF	X7R					-	-	-	4	23	41
SFBDC5000152MX	1.5nF						-	-	-	7	26	45
*SFBDC5000222MX	2.2nF						-	-	-	10	30	50
SFBDC5000332MX	3.3nF						-	-	-	13	33	52
*SFBDC5000472MX	4.7nF						-	-	1	16	36	55
SFBDC5000682MX	6.8nF						-	-	2	19	39	57
*SFBDC5000103MX	10nF						-	-	4	22	41	60
*SFBDC5000153MX	15nF						-	-	7	25	44	62
*SFBDC5000223MX	22nF		-	-	10	29	46	65				
SFBDC5000333MX	33nF		-	-	13	33	48	68				
*SFBDC2000473MX	47nF		100	250	-	1	16	35	50	70		
SFBDC2000683MX	68nF				-	2	19	39	54	>70		
*SFBDC1000104MX	100nF			50	125	-	4	22	41	57	>70	
*SFBDC0500154MX	150nF	-				7	25	45	60	>70		

# Also rated for operation at 115Vac 400Hz. Self heating will occur - evaluation in situ recommended. \* Recommended values. † Also available in COG/NPO.

**Ordering Information - SFBDC range**

SF	B	D	C	500	0101	M	C	0
Type	Case style	Thread	Electrical configuration	Voltage (dc)	Capacitance in picofarads (pF)	Tolerance	Dielectric	Hardware
Syfer Filter	4.75mm Hex Head	12-32 UNEF	C = C Filter	050 = 50V 100 = 100V 200 = 200V 500 = 500V	First digit is 0. Second and third digits are significant figures of capacitance code. The fourth digit is number of zeros following Example: 0101 = 100pF 0332 = 3300pF	M = ±20% Z = -20+80%	C = COG/NPO X = X7R	0 = Without 1 = With

Note: The addition of a 4-digit numerical suffix code can be used to denote changes to the standard part. Options include for example: change of finish / alternative voltage rating / non-standard intermediate capacitance values / test requirements. Please refer specific requests to the factory.



**Electrical Details**

Electrical Configuration	L-C Filter
Capacitance Measurement	@ 1000hr Point
Current Rating	10A
Insulation Resistance (IR)	10GΩ or 1000ΩF
Temperature Rating	-55°C to +125°C
Ferrite Inductance (Typical)	500nH



**Mechanical Details**

Body Flange Diameter	6.35mm (0.250")
Head (A/F)	4.75mm (0.187")
Nut A/F	7.92mm (0.312")
Washer diameter	9.40mm (0.370")
Mounting Torque	0.6Nm (5.31lbf in) max. if using nut 0.3Nm (2.65lbf in) max. into tapped hole
Mounting Hole Diameter	5.7mm ±0.1 (0.224" ±0.004")
Max. Panel Thickness	4.9mm (0.193")
Weight (Typical)	1.5g (0.05oz)
Finish	Silver plate on copper undercoat

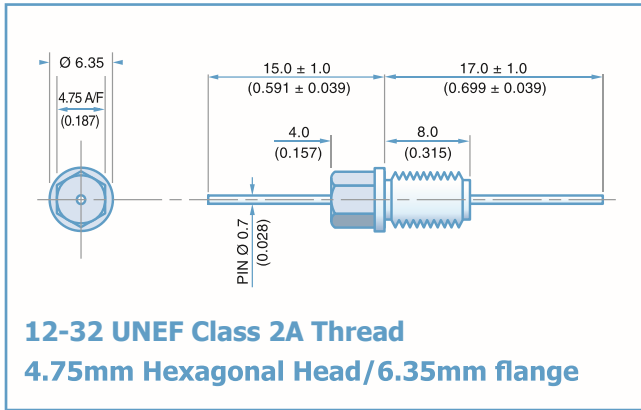
Product Code	Capacitance (±20%) UOS	Dielectric	Rated Voltage (Vdc)	DWV (Vdc)	Typical No-Load Insertion Loss (dB)					
					0.01MHz	0.1MHz	1MHz	10MHz	100MHz	1GHz
*SFBDL5000100ZC	10pF -20% / +80%	COG/NP0	500#	750	-	-	-	-	-	6
SFBDL5000150ZC	15pF -20% / +80%				-	-	-	-	-	9
SFBDL5000220ZC	22pF -20% / +80%				-	-	-	-	-	12
SFBDL5000330ZC	33pF -20% / +80%				-	-	-	-	1	15
*SFBDL5000470ZC	47pF -20% / +80%				-	-	-	-	2	19
*SFBDL5000680MC	68pF				-	-	-	-	4	20
*SFBDL5000101MC	100pF				-	-	-	-	7	24
SFBDL5000151MC	150pF				-	-	-	-	10	27
*SFBDL5000221MC	220pF				-	-	-	-	12	30
*SFBDL5000331MC	330pF				-	-	-	1	16	34
*SFBDL5000471MX	470pF	†X7R	500#	750	-	-	-	2	19	38
SFBDL5000681MX	680pF	-			-	-	3	22	41	
*SFBDL5000102MX	1.0nF	X7R			-	-	-	6	25	44
SFBDL5000152MX	1.5nF				-	-	-	9	29	48
*SFBDL5000222MX	2.2nF				-	-	-	12	31	51
SFBDL5000332MX	3.3nF				-	-	-	15	35	54
*SFBDL5000472MX	4.7nF				-	-	1	18	39	57
SFBDL5000682MX	6.8nF				-	-	2	21	41	60
*SFBDL5000103MX	10nF				-	-	4	23	43	63
*SFBDL5000153MX	15nF				-	-	7	27	46	66
*SFBDL5000223MX	22nF		-	-	10	30	48	68		
SFBDL5000333MX	33nF		-	-	13	34	50	70		
*SFBDL2000473MX	47nF		200	500	-	1	17	37	51	>70
SFBDL2000683MX	68nF		-	2	20	40	55	>70		
*SFBDL1000104MX	100nF		100	250	-	4	22	44	60	>70
*SFBDL0500154MX	150nF		50	125	-	7	25	47	62	>70

# Also rated for operation at 115Vac 400Hz. Self heating will occur - evaluation in situ recommended. \* Recommended values. † Also available in COG/NP0.

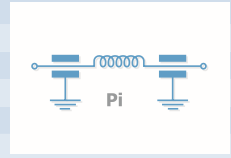
**Ordering Information - SFBDL range**

SF	B	D	L	500	0102	M	X	0
Type	Case style	Thread	Electrical configuration	Voltage (dc)	Capacitance in picofarads (pF)	Tolerance	Dielectric	Hardware
Syfer Filter	4.75mm Hex Head	12-32 UNEF	L = L-C Filter	<b>050</b> = 50V <b>100</b> = 100V <b>200</b> = 200V <b>500</b> = 500V	First digit is 0. Second and third digits are significant figures of capacitance code. The fourth digit is number of zeros following Example: <b>0101</b> = 100pF <b>0332</b> = 3300pF	<b>M</b> = ±20% <b>Z</b> = -20+80%	<b>C</b> = COG/NP0 <b>X</b> = X7R	<b>0</b> = Without <b>1</b> = With

Note: The addition of a 4-digit numerical suffix code can be used to denote changes to the standard part. Options include for example: change of finish / alternative voltage rating / non-standard intermediate capacitance values / test requirements. Please refer specific requests to the factory.



Electrical Details	
Electrical Configuration	Pi Filter
Capacitance Measurement	@ 1000hr Point
Current Rating	10A
Insulation Resistance (IR)	10GΩ or 1000ΩF
Temperature Rating	-55°C to +125°C
Ferrite Inductance (Typical)	250nH
Mechanical Details	
Body Flange Diameter	6.35mm (0.250")
Head (A/F)	4.75mm (0.187")
Nut A/F	7.92mm (0.312")
Washer diameter	9.40mm (0.370")
Mounting Torque	0.6Nm (5.31bf in) max. if using nut 0.3Nm (2.65bf in) max. into tapped hole
Mounting Hole Diameter	5.7mm ±0.1 (0.224" ±0.004")
Max. Panel Thickness	4.9mm (0.193")
Weight (Typical)	1.5g (0.05oz)
Finish	Silver plate on copper undercoat



Product Code	Capacitance (±20%) UOS	Dielectric	Rated Voltage (Vdc)	DWV (Vdc)	Typical No-Load Insertion Loss (dB)					
					0.01MHz	0.1MHz	1MHz	10MHz	100MHz	1GHz
*SFBDP5000200ZC	20pF -20% / +80%	COG/NPO	500#	750	-	-	-	-	1	11
SFBDP5000300ZC	30pF -20% / +80%				-	-	-	-	2	15
SFBDP5000440ZC	44pF -20% / +80%				-	-	-	-	3	19
SFBDP5000660ZC	66pF -20% / +80%				-	-	-	-	4	23
*SFBDP5000940ZC	94pF -20% / +80%				-	-	-	-	6	29
*SFBDP500136PMC	136pF				-	-	-	-	8	35
*SFBDP5000201MC	200pF				-	-	-	-	11	41
SFBDP5000301MC	300pF				-	-	-	1	15	50
*SFBDP5000441MC	440pF				-	-	-	2	20	57
*SFBDP5000661MC	660pF				-	-	-	3	25	65
*SFBDP5000941MX	940pF	X7R	500#	750	-	-	-	5	31	68
SFBDP5001N36MX	1.36nF				-	-	-	7	37	>70
*SFBDP5000202MX	2nF				-	-	-	10	44	>70
SFBDP5000302MX	3nF				-	-	-	13	51	>70
*SFBDP5000442MX	4.4nF				-	-	1	17	59	>70
SFBDP5000662MX	6.6nF				-	-	2	21	64	>70
*SFBDP5000942MX	9.4nF				-	-	4	27	68	>70
SFBDP50013N6MX	13.6nF				-	-	6	34	>70	>70
*SFBDP5000203MX	20nF				-	-	9	40	>70	>70
*SFBDP5000303MX	30nF				-	-	13	48	>70	>70
*SFBDP5000443MX	44nF	-	-	1	14	54	>70	>70		
SFBDP5000663MX	66nF	-	-	2	17	63	>70	>70		
*SFBDP2000943MX	94nF		200	500	-	4	18	68	>70	>70
SFBDP200136NMX	136nF		200	500	-	8	25	>70	>70	>70
*SFBDP1000204MX	200nF		100	250	-	10	27	>70	>70	>70
*SFBDP0500304MX	300nF		50	125	-	13	30	>70	>70	>70

# Also rated for operation at 115Vac 400Hz. Self heating will occur - evaluation in situ recommended. \* Recommended values. † Also available in COG/NPO.

**Ordering Information - SFBDP range**

SF	B	D	P	200	0943	M	X	0
Type	Case style	Thread	Electrical configuration	Voltage (dc)	Capacitance in picofarads (pF)	Tolerance	Dielectric	Hardware
Syfer Filter	4.75mm Hex Head	12-32 UNEF	P = Pi Filter	050 = 50V 100 = 100V 200 = 200V 500 = 500V	First digit is 0. Second and third digits are significant figures of capacitance code. The fourth digit is number of zeros following Example: 0201 = 200pF 0943 = 94000pF	M = ±20% Z = -20+80%	C = COG/NPO X = X7R	0 = Without 1 = With

Note: The addition of a 4-digit numerical suffix code can be used to denote changes to the standard part. Options include for example: change of finish / alternative voltage rating / non-standard intermediate capacitance values / test requirements. Please refer specific requests to the factory.



### Electrical Details

Electrical Configuration	T Filter
Capacitance Measurement	@ 1000hr Point
Current Rating	10A
Insulation Resistance (IR)	10GΩ or 1000ΩF
Temperature Rating	-55°C to +125°C
Ferrite Inductance (Typical)	450nH



### Mechanical Details

Body Flange Diameter	6.35mm (0.250")
Head (A/F)	4.75mm (0.187")
Nut A/F	7.92mm (0.312")
Washer diameter	9.40mm (0.370")
Mounting Torque	0.6Nm (5.31lbf in) max. if using nut 0.3Nm (2.65lbf in) max. into tapped hole
Mounting Hole Diameter	5.7mm ±0.1 (0.224" ±0.004")
Max. Panel Thickness	4.9mm (0.193")
Weight (Typical)	1.5g (0.05oz)
Finish	Silver plate on copper undercoat

Product Code	Capacitance (±20%) UOS	Dielectric	Rated Voltage (Vdc)	DWV (Vdc)	Typical No-Load Insertion Loss (dB)					
					0.01MHz	0.1MHz	1MHz	10MHz	100MHz	1GHz
*SFBDT5000100ZC	10pF -20% / +80%	COG/NP0	500#	750	-	-	-	-	-	9
SFBDT5000150ZC	15pF -20% / +80%				-	-	-	-	-	11
SFBDT5000220ZC	22pF -20% / +80%				-	-	-	-	1	14
SFBDT5000330ZC	33pF -20% / +80%				-	-	-	-	2	18
*SFBDT5000470ZC	47pF -20% / +80%				-	-	-	-	4	20
*SFBDT5000680MC	68pF				-	-	-	-	6	23
*SFBDT5000101MC	100pF				-	-	-	-	9	27
SFBDT5000151MC	150pF				-	-	-	-	12	30
*SFBDT5000221MC	220pF				-	-	-	-	15	33
*SFBDT5000331MC	330pF				-	-	-	1	19	36
*SFBDT5000471MX	470pF	†X7R	500#	750	-	-	-	2	21	40
SFBDT5000681MX	680pF	-			-	-	4	24	43	
*SFBDT5000102MX	1.0nF	X7R			-	-	-	7	28	47
SFBDT5000152MX	1.5nF				-	-	-	10	30	50
*SFBDT5000222MX	2.2nF				-	-	-	13	34	53
SFBDT5000332MX	3.3nF				-	-	-	17	38	57
*SFBDT5000472MX	4.7nF				-	-	-	19	40	59
SFBDT5000682MX	6.8nF				-	-	1	23	43	63
*SFBDT5000103MX	10nF				-	-	4	26	45	66
*SFBDT5000153MX	15nF				-	-	7	29	47	68
*SFBDT5000223MX	22nF		-	-	10	33	49	70		
SFBDT5000333MX	33nF		-	-	14	36	50	>70		
*SFBDT2000473MX	47nF		200	500	-	1	17	39	52	>70
SFBDT2000683MX	68nF		-	2	20	42	57	>70		
*SFBDT1000104MX	100nF		100	250	-	4	22	46	62	>70
*SFBDT0500154MX	150nF		50	125	-	7	25	49	68	>70

# Also rated for operation at 115Vac 400Hz. Self heating will occur - evaluation in situ recommended. \* Recommended values. † Also available in COG/NP0.

### Ordering Information - SFBDT range

SF	B	D	T	500	0102	M	X	0
Type	Case style	Thread	Electrical configuration	Voltage (dc)	Capacitance in picofarads (pF)	Tolerance	Dielectric	Hardware
Syfer Filter	4.75mm Hex Head	12-32 UNEF	T = T Filter	<b>050</b> = 50V <b>100</b> = 100V <b>200</b> = 200V <b>500</b> = 500V	First digit is 0. Second and third digits are significant figures of capacitance code. The fourth digit is number of zeros following Example: <b>0101</b> = 100pF <b>0332</b> = 3300pF	<b>M</b> = ±20% <b>Z</b> = -20+80%	<b>C</b> = COG/NP0 <b>X</b> = X7R	<b>0</b> = Without <b>1</b> = With

Note: The addition of a 4-digit numerical suffix code can be used to denote changes to the standard part. Options include for example: change of finish / alternative voltage rating / non-standard intermediate capacitance values / test requirements. Please refer specific requests to the factory.

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