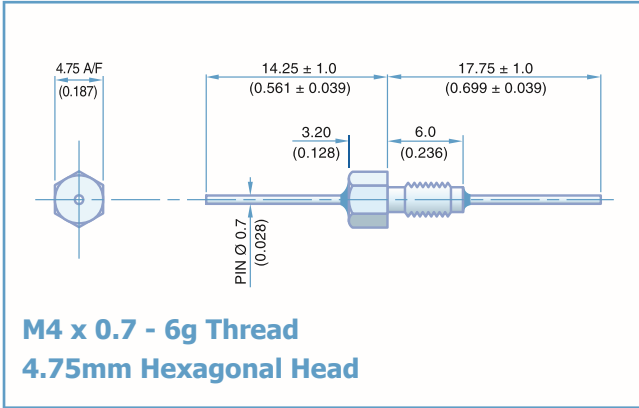




**THE DATASHEET OF  
SFBLC2000153MX0**





| 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) | N/A   |
| Mechanical Details           |   |
| Head (A/F)                   | 4.75mm (0.187")   |
| Nut A/F                      | 6.35mm (0.250")   |
| Washer diameter              | 8mm (0.315")  |
| Mounting Torque              | 0.5Nm (4.42bf in) max. if using nut<br>0.25Nm (2.41bf in) max. into tapped hole |
| Mounting Hole Diameter       | 4.2mm ±0.1 (0.165" ±0.004")   |
| Max. Panel Thickness         | 2.9mm (0.114")  |
| Weight (Typical)             | 1.2g (0.04oz)   |
| 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 |    |    |     |
| *SFBLC5000100ZC | 10pF -20% / +80%       | COG/NPO    | 500#                | 750       | -                                   | -      | -    | -     | -      | 4    |    |    |     |
| SFBLC5000150ZC  | 15pF -20% / +80%       |            |                     |           | -                                   | -      | -    | -     | -      | 7    |    |    |     |
| SFBLC5000220ZC  | 22pF -20% / +80%       |            |                     |           | -                                   | -      | -    | -     | -      | 10   |    |    |     |
| SFBLC5000330ZC  | 33pF -20% / +80%       |            |                     |           | -                                   | -      | -    | -     | -      | 12   |    |    |     |
| *SFBLC5000470ZC | 47pF -20% / +80%       |            |                     |           | -                                   | -      | -    | -     | 1      | 15   |    |    |     |
| *SFBLC5000680MC | 68pF                   |            |                     |           | -                                   | -      | -    | -     | 2      | 18   |    |    |     |
| *SFBLC5000101MC | 100pF                  |            |                     |           | -                                   | -      | -    | -     | 4      | 22   |    |    |     |
| SFBLC5000151MC  | 150pF                  |            |                     |           | -                                   | -      | -    | -     | 7      | 25   |    |    |     |
| *SFBLC5000221MC | 220pF                  |            |                     |           | -                                   | -      | -    | -     | 10     | 29   |    |    |     |
| *SFBLC5000331MC | 330pF                  |            |                     |           | -                                   | -      | -    | -     | 13     | 33   |    |    |     |
| *SFBLC5000471MX | 470pF                  | †X7R       | 500#                | 750       | -                                   | -      | -    | 1     | 16     | 35   |    |    |     |
| SFBLC5000681MX  | 680pF                  |            |                     |           | -                                   | -      | -    | 2     | 19     | 36   |    |    |     |
| *SFBLC5000102MX | 1.0nF                  | X7R        | 500#                | 750       | -                                   | -      | -    | 4     | 23     | 41   |    |    |     |
| SFBLC5000152MX  | 1.5nF                  |            |                     |           | -                                   | -      | -    | 7     | 26     | 45   |    |    |     |
| *SFBLC5000222MX | 2.2nF                  |            |                     |           | -                                   | -      | -    | 10    | 30     | 50   |    |    |     |
| SFBLC5000332MX  | 3.3nF                  |            |                     |           | -                                   | -      | -    | 13    | 33     | 52   |    |    |     |
| *SFBLC5000472MX | 4.7nF                  |            |                     |           | -                                   | -      | 1    | 16    | 36     | 55   |    |    |     |
| SFBLC5000682MX  | 6.8nF                  |            |                     |           | -                                   | -      | 2    | 19    | 39     | 57   |    |    |     |
| *SFBLC5000103MX | 10nF                   |            |                     |           | -                                   | -      | 4    | 22    | 41     | 60   |    |    |     |
| *SFBLC5000153MX | 15nF                   |            |                     |           | -                                   | -      | 7    | 25    | 44     | 62   |    |    |     |
| *SFBLC5000223MX | 22nF                   |            |                     |           | -                                   | -      | 10   | 29    | 46     | 65   |    |    |     |
| SFBLC5000333MX  | 33nF                   |            |                     |           | -                                   | -      | 13   | 33    | 48     | 68   |    |    |     |
| *SFBLC2000473MX | 47nF                   |            |                     |           | -                                   | 200    | 500  | -     | 1      | 16   | 35 | 50 | 70  |
| SFBLC2000683MX  | 68nF                   |            |                     |           | -                                   | 200    | 500  | -     | 2      | 19   | 39 | 54 | >70 |
| *SFBLC1000104MX | 100nF                  |            |                     |           | -                                   | 100    | 250  | -     | 4      | 22   | 41 | 57 | >70 |
| *SFBLC0500154MX | 150nF                  |            |                     |           | -                                   | 50     | 125  | -     | 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 - SFBLC range**

| SF           | B               | L      | C                        | 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 | M4     | C = C Filter             | <b>050</b> = 50V<br><b>100</b> = 100V<br><b>200</b> = 200V<br><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<br>Example: <b>0101</b> = 100pF<br><b>0332</b> = 3300pF | <b>M</b> = ±20%<br><b>Z</b> = -20+80% | <b>C</b> = COG/NPO<br><b>X</b> = X7R | <b>0</b> = Without<br><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     | 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) | 50nH            |



### Mechanical Details

|                        |   |
|------------------------|---|
| Body Flange Diameter   | 4.75mm (0.187")   |
| Head (A/F)             | 6.0mm (0.236")  |
| Nut A/F                | 8.0mm (0.315")  |
| Mounting Torque        | 0.5Nm (4.42lbf in) max. if using nut<br>0.25Nm (2.21lbf in) max. into tapped hole |
| Mounting Hole Diameter | 4.2mm ±0.1 (0.165" ±0.004")   |
| Max. Panel Thickness   | 2.9mm (0.114")  |
| Weight (Typical)       | 1.2g (0.04oz)   |
| 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 |    |    |     |
| *SFBLL5000100ZC | 10pF -20% / +80%       | COG/NPO    | 500#                | 750       | -                                   | -      | -    | -     | -      | 6    |    |    |     |
| SFBLL5000150ZC  | 15pF -20% / +80%       |            |                     |           | -                                   | -      | -    | -     | -      | 9    |    |    |     |
| SFBLL5000220ZC  | 22pF -20% / +80%       |            |                     |           | -                                   | -      | -    | -     | -      | 12   |    |    |     |
| SFBLL5000330ZC  | 33pF -20% / +80%       |            |                     |           | -                                   | -      | -    | -     | 1      | 15   |    |    |     |
| *SFBLL5000470ZC | 47pF -20% / +80%       |            |                     |           | -                                   | -      | -    | -     | 2      | 19   |    |    |     |
| *SFBLL5000680MC | 68pF                   |            |                     |           | -                                   | -      | -    | -     | 4      | 20   |    |    |     |
| *SFBLL5000101MC | 100pF                  |            |                     |           | -                                   | -      | -    | -     | 7      | 24   |    |    |     |
| SFBLL5000151MC  | 150pF                  |            |                     |           | -                                   | -      | -    | -     | 10     | 27   |    |    |     |
| *SFBLL5000221MC | 220pF                  |            |                     |           | -                                   | -      | -    | -     | 12     | 30   |    |    |     |
| *SFBLL5000331MC | 330pF                  |            |                     |           | -                                   | -      | -    | 1     | 16     | 34   |    |    |     |
| *SFBLL5000471MX | 470pF                  | †X7R       | 500#                | 750       | -                                   | -      | -    | 2     | 19     | 38   |    |    |     |
| SFBLL5000681MX  | 680pF                  |            |                     |           | -                                   | -      | -    | 3     | 22     | 41   |    |    |     |
| *SFBLL5000102MX | 1.0nF                  | X7R        | 500#                | 750       | -                                   | -      | -    | 6     | 25     | 44   |    |    |     |
| SFBLL5000152MX  | 1.5nF                  |            |                     |           | -                                   | -      | -    | 9     | 29     | 48   |    |    |     |
| *SFBLL5000222MX | 2.2nF                  |            |                     |           | -                                   | -      | -    | 12    | 31     | 51   |    |    |     |
| SFBLL5000332MX  | 3.3nF                  |            |                     |           | -                                   | -      | -    | 15    | 35     | 54   |    |    |     |
| *SFBLL5000472MX | 4.7nF                  |            |                     |           | -                                   | -      | 1    | 18    | 39     | 57   |    |    |     |
| SFBLL5000682MX  | 6.8nF                  |            |                     |           | -                                   | -      | 2    | 21    | 41     | 60   |    |    |     |
| *SFBLL5000103MX | 10nF                   |            |                     |           | -                                   | -      | 4    | 23    | 43     | 63   |    |    |     |
| *SFBLL5000153MX | 15nF                   |            |                     |           | -                                   | -      | 7    | 27    | 46     | 66   |    |    |     |
| *SFBLL5000223MX | 22nF                   |            |                     |           | -                                   | -      | 10   | 30    | 48     | 68   |    |    |     |
| SFBLL5000333MX  | 33nF                   |            |                     |           | -                                   | -      | 13   | 34    | 50     | 70   |    |    |     |
| *SFBLL2000473MX | 47nF                   |            |                     |           | -                                   | 200    | 500  | -     | 1      | 17   | 37 | 51 | >70 |
| SFBLL2000683MX  | 68nF                   |            |                     |           | -                                   | 200    | 500  | -     | 2      | 20   | 40 | 55 | >70 |
| *SFBLL1000104MX | 100nF                  |            |                     |           | -                                   | 100    | 250  | -     | 4      | 22   | 44 | 60 | >70 |
| *SFBLL0500154MX | 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/NPO.

### Ordering Information - SFBLL range

| SF           | B               | L      | L                        | 500   | 0102   | M                                     | X                                    | 0                                     |
|--------------|-----------------|--------|--------------------------|---|--|---------------------------------------|--------------------------------------|---------------------------------------|
| Type         | Case style      | Thread | Electrical configuration | Voltage (dc)  | Capacitance in picofarads (pF)   | Tolerance                             | Dielectric                           | Nuts & Washers                        |
| Syfer Filter | 4.75mm Hex Head | M4     | L = L-C Filter           | <b>050</b> = 50V<br><b>100</b> = 100V<br><b>200</b> = 200V<br><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<br>Example: <b>0101</b> = 100pF<br><b>0332</b> = 3300pF | <b>M</b> = ±20%<br><b>Z</b> = -20+80% | <b>C</b> = COG/NPO<br><b>X</b> = X7R | <b>0</b> = Without<br><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) | 75nH            |  |

**Mechanical Details**

|                        |   |
|------------------------|---|
| Head (A/F)             | 4.75mm (0.187")   |
| Nut A/F                | 6.0mm (0.236")  |
| Washer diameter        | 7.90mm (0.311")   |
| Mounting Torque        | 0.5Nm (4.42lbf in) max. if using nut<br>0.25Nm (2.21lbf in) max. into tapped hole |
| Mounting Hole Diameter | 4.2mm ±0.1 (0.165" ±0.004")   |
| Max. Panel Thickness   | 2.9mm (0.114")  |
| Weight (Typical)       | 1.2g (0.04oz)   |
| Finish                 | Silver plate on copper undercoat  |

| Product Code    | Capacitance (-20%+80%) | Dielectric | Rated Voltage (Vdc) | DWV (Vdc) | Typical No-Load Insertion Loss (dB) |        |      |       |        |      |
|-----------------|------------------------|------------|---------------------|-----------|-------------------------------------|--------|------|-------|--------|------|
|                 |                        |            |                     |           | 0.01MHz                             | 0.1MHz | 1MHz | 10MHz | 100MHz | 1GHz |
| *SFBLP5000200ZC | 20pF                   | COG/NPO    | 500#                | 750       | -                                   | -      | -    | -     | 1      | 11   |
| SFBLP5000440ZC  | 44pF                   |            |                     |           | -                                   | -      | -    | -     | 3      | 19   |
| SFBLP5000940ZC  | 94pF                   |            |                     |           | -                                   | -      | -    | -     | 6      | 25   |
| *SFBLP5000201ZC | 200pF                  |            |                     |           | -                                   | -      | -    | -     | 11     | 33   |
| SFBLP5000441ZC  | 440pF                  |            |                     |           | -                                   | -      | -    | 2     | 18     | 45   |
| SFBLP5000941ZX  | 940pF                  | X7R        |                     |           | -                                   | -      | -    | 5     | 25     | 60   |
| *SFBLP5000202ZX | 2nF                    |            |                     |           | -                                   | -      | -    | 10    | 40     | 70   |
| SFBLP5000442ZX  | 4.4nF                  |            |                     |           | -                                   | -      | 1    | 17    | 47     | >70  |
| *SFBLP5000942ZX | 9.4nF                  |            |                     |           | -                                   | -      | 4    | 24    | 60     | >70  |
| *SFBLP2000203ZX | 20nF                   |            |                     |           | 200                                 | 500    | -    | -     | 9      | 28   |
| *SFBLP1000443ZX | 44nF                   | 100        | 250                 | -         | 0                                   | 14     | 42   | >70   | >70    |      |
| *SFBLP0500943ZX | 94nF                   | 50         | 125                 | -         | 2                                   | 18     | 57   | >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 - SFBLP range**

| SF           | B               | L      | P                        | 050   | 0943  | Z           | X                      | 0                                     |
|--------------|-----------------|--------|--------------------------|---|---|-------------|------------------------|---------------------------------------|
| Type         | Case style      | Thread | Electrical configuration | Voltage (dc)  | Capacitance in picofarads (pF)  | Tolerance   | Dielectric             | Nuts & Washers                        |
| Syfer Filter | 4.75mm Hex Head | M4     | P = Pi Filter            | <b>050</b> = 50V<br><b>100</b> = 100V<br><b>200</b> = 200V<br><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<br>Example: <b>0201</b> = 200pF<br><b>0943</b> = 94000pF | Z = -20+80% | C = COG/NPO<br>X = X7R | <b>0</b> = Without<br><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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