

## Best sellers

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See page 485

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See page 483

### LCR

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See page 483

### SCHAFFNER

Chassis mounting filter 10A

From **£8.62**



See page 480

### RVFM

Commercial IEC inlet filter

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See page 481

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See page 483

## Associated products

### Joyin

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See page 484

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### SCHAFFNER

Chassis mounting filter 1A

From **£8.11**



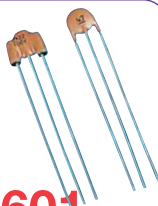
See page 480

### muRata

Three terminal capacitors

See page 485

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### Joyin

Metal oxide varistors 11V 0.8J

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### MICROTHERM

NTC Inrush limiters

See page 484

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### SCHAFFNER

Compact PCB mounting EMC filter

From **£5.60**



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## PCB Mounting

### SCHAFFNER

#### Compact PCB mounting EMC filter

The Schaffner FN406 PCB mounting EMC filter offers high performance in a compact form and is ideal for equipment applications where space is at a premium.

- Footprint of just 15 x 45mm reduces PCB area
- Height similar to components used in circuits such as switched mode power supplies
- Aluminium housing provides excellent RF shielding against coupling effects from nearby components
- Approved to **VDE, SEV, UL** and **CSA**



Technical specification	
Voltage rating	250V AC
Line frequency	0 to 400Hz
Maximum leakage	190µA/phase
Inductance	0.5A 24mH
	1A 12mH
Capacitors	100n between lines (Class X2)
	2.2n lines to earth (Class Y)
Operating temperature	-25°C to +85°C
Dimensions	29.5(H) x 15(W) x 45(D)
	Pins 0.7(L) x 0.8 x 0.8(W)

Schaffner part nos.	0.5A	FN406-0.5/02	1A	FN406-1/0.2
Type	Order code	1+	10+	50+

0.5A PCB Filter	<b>26-4520</b>	7.09	6.07	5.60
1A PCB Filter	<b>26-4525</b>	7.09	6.07	5.60

### PowerPax UK

#### 0.5W and 1W Ultra compact PCB mounting power supplies

Believed to be the smallest, fully functional switch mode power supplies in the world, the BPS product series is available in output powers of 0.5W and 1.0W providing a drop in solution enabling designers to reduce the engineering cycle, simplify certification and reduce time to market.



The BPS series is based on a patented circuit design that ensures conversion efficiency is maximized and effectively regulates output voltages evenly over the entire wide range 85 to 265V AC input. Single outputs of 8 and 14V DC and dual outputs of 8 and 5V DC are available. All units have full short circuit protection and input to output isolation of 3KV AC. This series offers an extremely small footprint of just 22.6 x 26.2 x 13.5mm (8cm<sup>3</sup>) in a rugged tamper-proof sealed package.

The ranges low emission characteristics make it particularly suitable for ZigBee IEEE (802.15.4), Z-wave, Bluetooth GSM, GPRS and other emissions critical applications, as well as other demanding applications such as the charging of super capacitors, security systems, standby power and lighting occupancy sensors. Full technical support is offered where required.

- Universal AC Input 85-265 V AC, 50/60Hz (Input Surge Withstand 308V,
- Ultra miniature Size- 13.9cm<sup>3</sup> (0.84in<sup>3</sup>), the smallest complete module available
- Standard Single Component Solution
- Very low no-load input power <30mW
- 3000 V AC Isolation and Class II double insulation
- Up to 75% efficient
- Power modules may be operated in series or parallel giving increased design flexibility
- Voltage regulated, power limited design, enable the powering of super caps
- Rugged sealed design
- EN 55022, Class B; FCC Part 15, Class B,
- **UL, CE, CB** safety approved. **RoHS** compliant

Type	Order code	1+	10+
0.5W BPS 0.5-08-00	<b>84-2621</b>	13.32	12.07
0.5W BPS 0.5-14-00	<b>84-2622</b>	12.48	11.32
1.0W BPS 1-08-00	<b>84-2623</b>	14.42	13.07
1.0W BPS 1-14-00	<b>84-2624</b>	14.15	12.83
1.0W BPS 1-08-50	<b>84-2625</b>	15.26	13.83

### PowerPax UK

#### 3W and 5W Ultra compact PCB mounting power supplies

The 3W and 5W series of AC/DC modules offer a fully isolated, high efficiency PCB mounting power supplies suitable for many applications. This range features universal 85-264V AC 50/60Hz AC input and single output options of 5V DC, 9V DC, 12V DC and 24V DC in a compact package. All models feature inbuilt protection for overvoltage, short circuit and over temperature conditions and meet international safety and EMC standards.



- Universal Input: 85 -264VAC, 50/60Hz
- Low noise and ripple
- Over-voltage protection
- Short circuit protection
- Over temperature protection
- High efficiency
- High power density
- 3W units measure just 37 x 23 x 15mm
- 5W units measure just 50.8 x 25.4 x 15.16mm
- **5W series EN60601-1** medically approved
- **CE** and **UL** safety approved. **RoHS** compliant

Type	Order code	1+	10+
3W PD03-10B05	<b>84-2626</b>	9.94	9.01
3W PD03-10B09	<b>84-2627</b>	9.94	9.01
3W PD03-10B12	<b>84-2628</b>	9.94	9.01
3W PD03-10B24	<b>84-2629</b>	9.94	9.01
5W PD05-20B05	<b>84-2630</b>	11.02	10.00
5W PD05-20B09	<b>84-2631</b>	11.02	10.00
5W PD05-20B12	<b>84-2632</b>	11.02	10.00
5W PD05-20B24	<b>84-2633</b>	11.02	10.00
3W PD03-10B03	<b>84-2643</b>	9.38	8.50
5W PD05-20B03	<b>84-2644</b>	10.40	9.43

### PowerPax UK

#### 10W and 15W Ultra compact PCB mounting power supplies

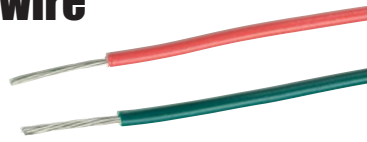
The 10W and 15W series of AC/DC modules offer a fully isolated, high efficiency PCB mounting power supplies suitable for many applications. This range features universal 85-264V AC 50/60Hz AC input and single output options of 5vdc, 9V DC, 12V DC and 24V DC (15W series includes a 48V DC version) in a compact package. All models feature inbuilt protection for overvoltage, short circuit and over temperature conditions and meet international safety and EMC standards.



- Universal Input: 85 -264V AC, 50/60Hz
- Low noise and ripple
- Over-voltage protection
- Short circuit protection
- Over temperature protection
- High efficiency
- High power density
- 10W units measure just 55 x 45 x 21mm
- 15W units measure just 62 x 45 x 22.5mm

Type	Order code	1+	10+
PH10-10B05	<b>84-2634</b>	12.50	11.33
PH10-10B09	<b>84-2635</b>	12.50	11.33
10W PH10-20B12 PH10-10B12	<b>84-2636</b>	12.50	11.33
10W PH10-10B24	<b>84-2637</b>	12.50	11.33
15W PH15-10B05	<b>84-2638</b>	13.85	12.56
15W PH15-10B09	<b>84-2639</b>	13.85	12.56
15W PH15-10B12	<b>84-2640</b>	13.85	12.56
15W PH15-10B24	<b>84-2641</b>	13.85	12.56
15W PH15-10B48	<b>84-2642</b>	13.85	12.56
PH10-10B03	<b>84-2646</b>	11.79	10.69

## Equipment wire



## Chassis mounting

### Corcom

#### RFI Power line filters

These RFI power line filters are general purpose common-mode filters, effectively providing RFI control of line-to-ground noise in a small size at low cost. These filters are designed to meet a wide variety of electronic and electrical applications. These models meet the very low leakage current requirements of VDE portable equipment, and (120 Volt) **UL544** non-patient medical equipment.



- Choice of current ratings
- 250V AC rated
- Mains operating frequency
- **UL** recognised, **CSA** certified, **VDE** approved
- **Corcom B** series

Technical specification	
Leakage current max.	0.36mA
Hipot line-to-ground	2250V DC
Hipot line-to-line	1450V DC
Operating frequency	50/60Hz
Rated voltage max.	250V AC

Order code	Mfrs. pt. no.	Rated current
<b>26-4878</b>	<b>5EB1</b>	5A

Type	Rating	Order code	1+
RFI Filter	5A	<b>26-4878</b>	5.56

### SCHAFFNER

#### Chassis mounting filter

The Schaffner FN2010 family is designed to provide an economic solution for a wide variety of general purpose filtering requirements.



- Available in a wide range of ratings
- Individual application requirements are easily and economically matched
- 6.3 x 0.8mm faston terminations
- Approved to **VDE, UL** and **CSA**

Technical specification	
Voltage rating	250V AC
Line frequency	0-400Hz
Maximum leakage	0.4mA/phase
Inductance	1A 12mH
	3A 2.5mH
	6A 1mH
	10A 0.8mH

Capacitors	
100n between lines (Class X2)	
4.7n lines to earth (Class Y)	

Dimensions	
1A - 6A	43.5 x 35 x 24.3(H) FC 54mm
10A	43.5 x 35 x 29.3(H) FC 54mm

Operating temperature	
-25°C to +85°C	

Type	Order code	1+	10+	50+	100+
1A Chassis filter	<b>26-4560</b>	9.07	8.97	8.66	8.11
3A Chassis filter	<b>26-4565</b>	9.99	9.88	9.48	8.93
6A Chassis filter	<b>26-4570</b>	9.59	9.49	9.16	8.67
10A Chassis filter	<b>26-4575</b>	9.64	9.54	9.23	8.62

**SCHAFFNER**

**FN 2060 General purpose multi-stage chassis filter**

The Schaffner FN2060 is a general purpose, multi-stage filter which incorporates additional inductance stages for higher common mode attenuation.

- 250V ac rated
- Line frequency 0-400Hz
- MTBF 950,000 hours
- Provides an economic solution for many general purpose filtering requirements
- 6.3 x 0.8mm faston terminations
- Approved to **VDE, UL and CSA**



Technical specification						
Mfr. pt. no.	Current rating A @ 40°C	Maximum leakage	Inductance	Capacitance Cx uF	Capacitance Cy nF	Resistance MR
FN 2060 -6	6	0.4mA/phase	0.97	0.22	4.7	1
FN 2060 -10	10	0.4mA/phase	0.8	0.47	4.7	0.47

Type	Order code	1+	10+	25+
FN 2060 -6	<b>26-5260</b>	16.27	15.25	13.72

**Corcom**

**RFI Filters 3-phase low current**

This lower current RFI filter is designed to provide filtering to industrial 3-phase applications. They provide filtering in each of the three phase lines plus the neutral in WYE applications.

- Rated at 440V AC
- Mains operating frequency
- **UL** recognised, **CSA** certified, **VDE** approved
- **Corcom AYO** series



Technical specification			
Leakage current max.	5.5mA		
Hipot line-to-ground	1500V DC		
Hipot line-to-line	1450V DC		
Operating frequency	50/60Hz		
Rated voltage phase-to-phase max.	440V AC		
Rated voltage phase-to-neutral/ground max.	250V AC		

Order code	Mfrs. pt. no.	Rated current	
<b>26-4870</b>	<b>3AY01</b>	3A	

Type	Rating	Order code	1+
RFI Filter	3A	<b>26-4870</b>	15.65

**Same day despatch  
GUARANTEED!**

On all orders placed  
between 8am and 8pm  
Monday to Friday



**Panel mounting**

**Corcom**

**RFI Filter/IEC socket**

The **EEB Series** of RFI filter connectors is a new generation of compact units that combine an RFI filter with an IEC connector. Electrically, the filters provide enhanced differential mode performance, and mechanically the slimmer size of the units make them compatible with all similar filters on the market.

- 250V AC rated
- Mains operating frequency
- **UL** recognised, **CSA** certified, **VDE** approved
- **Corcom EEB** series



Technical specification			
Leakage current max.	0.38mA		
Hipot line-to-ground	2250V DC		
Hipot line-to-line	1450V DC		
Operating frequency	50/60Hz		
Rated voltage max.	250V AC		

Order code	Mfrs. pt. no.	Rated current	
<b>26-4892</b>	<b>10EEB1</b>	10A	

Type	Order code	1+
Filter/IEC socket	<b>26-4892</b>	6.30



**Fast delivery**

All orders received by  
8pm – Monday to Friday  
are despatched the same day

**Corcom**

**RFI Filter/IEC socket enhanced**

The **EEJ Series** is the next generation of power inlet filters.

The 3A to 15A versions are flange mounted and mechanically equivalent to the **EEB Series**. The performance has been enhanced to meet the needs for more attenuation. The **EEJ Series** also has an extended metal flange around the socket for improved high frequency EMI shielding as well as a larger contact area for the panel ground. The series also includes a 20A version that uses the inlet IEC 320/C20. This product was designed to keep up with the demand for higher current equipment. Applications include higher current power supplies and computing equipment, which consist of work stations, base stations and servers.



- Choice of current ratings
- 250V AC rated
- Mains operating frequency
- **UL** recognised, **CSA** certified, **VDE** approved
- **Corcom EEJ** series

Technical specification			
Leakage current max.	0.38mA		
Hipot line-to-ground	1500V DC		
Hipot line-to-line	1450V DC		
Operating frequency	50/60Hz		
Rated voltage max.	250V AC		

Order code	Mfrs. pt. no.	Rated current	
<b>26-4894</b>	<b>3EEJ1</b>	3A	
<b>26-4902</b>	<b>20EEJ1</b>	20A	

Type	Rating	Order code	1+
Filter/IEC skt enh.	3A	<b>26-4894</b>	3.78
Filter/IEC skt enh.	20A	<b>26-4902</b>	6.55

**RVFM**

**IEC Inlet filters general purpose**

A range of low cost general purpose filters that provide effective line-to-ground filtering at up to 6A.

- IEC Connectors
- Rated voltage 250V AC
- Compact design
- Approved by **CSA, UL, VDE, SEMKO, NEMKO, DEMKO, FIMKO**



Technical specification						
Order code	26-7751	26-7753	26-7755			
Rated current	1A	3A	6A			
Rated voltage	250V AC	250V AC	250V AC			
Leakage current	0.8mA	0.8mA	0.8mA			
HIPOT line to line	1450V DC	1450V DC	1450V DC			
HIPOT line to ground	2250V DC	2250V DC	2250V DC			
Insulation resistance	100MΩ	100MΩ	100MΩ			
DC resistance	0.5Ω max.	0.2Ω max.	0.15Ω max.			
Operating temperature	-25°C to +85°C	-25°C to +85°C	-25°C to +85°C			

Type	Order code	1+	10+	50+	100+
1A IEC Filter	<b>26-7751</b>	2.43	2.22	1.90	1.63
3A IEC Filter	<b>26-7753</b>	2.43	2.22	1.90	1.63
6A IEC Filter	<b>26-7755</b>	2.43	2.22	1.90	1.63

**RVFM**

**Commercial IEC inlet filter**

A low cost commercial IEC inlet filter offering a very cost effective solution to power filtering requirements in a wide range of equipment.

- Compact design gives behind panel depth of just 50mm
- Terminated with 6.3 x 0.8mm faston tabs
- Approved to **UL, CSA and VDE**



Technical specification			
Operating voltage	250V AC		
Maximum leakage	115V AC 60Hz:0.25mA		
	230V AC 50Hz:0.5mA		
Inductance	1A	6.5mH	
	3A	2.5mH	
	6A	0.8mH	
Capacitors	100n between lines (Class X2)		
	2n2 lines to earth (Class Y)		
Temperature range	-25°C to +85°C		
Panel cut-out	28.5 x 21.6mm		
Dimensions	53.85 x 21.4 x 42mm		

Type	Order code	1+	10+	50+	100+
1A Filter	<b>26-7750</b>	3.13	2.54	2.11	1.75
3A Filter	<b>26-7752</b>	3.32	2.79	2.32	2.05
6A Filter	<b>26-7754</b>	3.13	2.54	2.11	1.75

**No minimum order value**

UK mainland only

**Corcom**

**RFI/EMI Filters for switching PSU**

This series of RFI power line filters has been developed specifically for switching power supplies and is designed to be all the power line filtering needed to control conducted emissions down to 10kHz. High attenuation is provided for both common mode and differential mode interference throughout the frequency range with no degradation of performance due to the large peak currents drawn by switching power supplies. These filters are an ideal choice for applications that must meet emission limits below 150kHz, as well as the mandated limits above 150kHz. In most cases they will bring such equipment into compliance with the B-level limits of **CISPR 22**. They are also well suited for bringing ISM equipment (such as ultrasonic cleaners) into compliance with the limits of **FCC Part 18**, from 10kHz to 30MHz. In addition the filters meet the very low leakage current requirements for VDE portable equipment, and **UL544** non-patient medical equipment.



- Choice of current ratings
- 250V AC rated
- Mains operating frequency
- **UL** recognised, **CSA** certified, **VDE** approved
- **Corcom EQ** series

Technical specification  
Leakage current max. 0.51mA  
Hipot line-to-ground 2250V DC  
Hipot line-to-line 1450V DC  
Operating frequency 50/60Hz  
Rated voltage max. 250V AC

Order code	Mfrs. pt. no.	Rated current
26-4914	3EQ1	3A
26-4916	6EQ1	6A
26-4918	20EQ1	20A

Type	Order code	1+
RFI Filter for PSU	20A	26-4918 42.49

**Corcom**

**Chameleon power entry modules  
Single and dual voltage**

The **Chameleon** series of adaptable power entry modules gives greater flexibility of design in a more compact package. As the first 10A module to provide all five power entry functions in one compact design, the module readily adapts to its environment and the needs of international markets.



The general purpose filter offers protection for applications where line-to-ground and line-to-line noise must be controlled. The filters are designed to meet low leakage requirements of VDE portable equipment.

- Choice of single or dual input voltage
- Available current ratings 3, 6 or 10A
- General purpose filter
- Compact design
- Snap-in or flange mounting
- IEC power line connector
- Double pole single throw (DPST) switch
- **UL** recognised, **CSA** certified, **VDE** approved
- **Corcom P** series

Technical specification  
Leakage current max. 0.5mA  
Hipot line-to-ground 1500V DC  
Hipot line-to-line 1450V DC  
Operating frequency 50/60Hz  
Rated voltage max. 250V AC

Order code	Mfrs. pt. no.	Operating voltage	Rated current
26-4920	PE0S0SS3B	Single 230V AC	3A

Type	Rating	Order code	1+
<b>Single voltage</b>			
IEC Power entry fit	3A	26-4920	12.99

**Corcom**

**Shielded line filters**

The **SRB Series** are reduced depth, shielded line filters that feature high levels of common mode performance, minimising conducted emissions and reducing radiated emissions. Ideally suited for power supplies or other applications which require a minimum depth low cost solution.



- Choice of filter capacitor values for different performance requirements
- Rated at 250V AC
- Mains operating frequency
- Complete shield design
- Available in one of two designs, unfiltered or with filter
- Flange or snap-in mounting
- **UL** recognised, **CSA** certified, **VDE** approved
- **Corcom SRB** series

Technical specification  
Hipot line-to-ground 1500V DC  
Hipot line-to-line 1450V DC  
Operating frequency 50/60Hz  
Rated voltage max. 250V AC

Order code	Mfrs. pt. no.	Capacitor filter	Capacitor value	Leakage current max.
26-4940	15SRBS1	-	-	5µA
26-4946	15SRBS1-Y	Y	2200pF	0.28mA

Type	Leakage current max.	Order code	1+
Line filter deep	5µA	26-4940	1.08
Line filter deep	0.28mA	26-4946	1.19

**SCHAFFNER**

**High performance IEC inlet filter**

The Schaffner **FN9222** series provide **IEC950** compliant power entry in a compact housing offering an extremely cost effective solution to power filtering, particularly suited to portable equipment applications requiring a lightweight unit.



- These filters no longer feature a bleed resistor (unnecessary in filters up to 15A)
- Terminated with 6.3 x 0.8mm faston tabs
- Approved to **VDE**, **UL** and **CSA**

Technical specification  
Operating voltage 250V AC  
Line frequency 0-400Hz  
Maximum leakage 190µA/phase  
Inductance 1A 12.0mH  
Capacitors 100n between lines (Class X2)  
2.2n lines to earth (Class Y)  
Temperature range -25°C to +85°C  
Schaffner part Nos. 1A **FN9222-1/06**

Type	Order code	1+
1A Filter	26-4450	4.175

**Prefilter**

**IEC Inlet filters with earth choke**

Single-stage filters with IEC inlet and earth inductor.



- High immunity
- Lightweight, compact package
- Cost-effective
- 6.3mm faston tabs
- **VDE** and **UL** approved
- **Prefilter** type **FDC-Z**

Technical specification  
Operating voltage 250V AC  
Line frequency 0-60Hz  
Maximum leakage 0.21mA  
Inductance 1A 2mH  
Capacitors 10nF between lines (Class X2)  
2.2nF lines to earth (Class Y)  
Dimensions 72 x 30.5 x 22.6mm behind panel  
Fixing centres 40mm  
Temperature range -25°C to +95°C

Type	Order code	1+
1A IEC With earth choke	26-4502	1.90

**SCHAFFNER**

**Double fused IEC inlet filter**

A range of IEC950 compliant double (both live and neutral lines) filters



- Built-in fuse holders
- Housed in a lightweight, compact package
- Terminated with 6.3 x 0.8mm faston tabs
- Approved to **VDE**, **UL** and **CSA**

Technical specification  
Operating voltage 250V AC  
Line frequency 0-400Hz  
Maximum leakage 191µA/phase  
Inductance 1A 5.3mH 4A 1mH  
2A 2.7mH 6A 0.3mH  
Capacitors 100n between lines (Class X2)  
2.2n lines to earth (Class Y)  
Fuseholder 2 x 20x5mm fuses  
Temperature range -25°C to +85°C  
Schaffner part Nos. 1A **FN9260-1/06** 4A **FN9260-4/06**  
2A **FN9260-2/06** 6A **FN9260-6/06**

Type	Order code	1+	10+	50+	100+
4A Fused filter	26-4490	14.95	13.95	12.45	11.45
6A Fused filter	26-4495	10.30			

## Moulded 13A plug/IEC lead



## Suppression

### LCR RC Network contact suppressor

Sudden interruption of current in an inductive circuit normally produces a high voltage surge. Damage to contacts occurs during arcing. In SCR or triac circuits incorrect functioning may occur due to arcing.

- The LCR RC network contact suppressor will suppress arcing and also reduce dV/dt
- The network also suppresses radio interference over a wide frequency range



Technical specification	
Capacitance	0.1µF ±10%
Resistance	1000 ±10%
Voltage rating	250V AC
Power rating	0.5W
Operating temperature	-55°C to +100°C
Dimensions	25(W) x 8(D) x 19(H)mm lead pitch 22.5mm, lead dia. 0.8mm

Type	Order code	1+	25+	100+	250+
Contact suppressor	26-5856	1.30	1.144	0.988	0.78

### LCR DIN Rail mounting contact suppressors

Wire ended DIN rail mounting contact suppressors designed to reduce contact arcing across switching contacts of control/switchgear contactors and relays.

- Suited to applications where inductive loads are involved and will increase life of switched contacts
- Will also reduce RF interference generated when switching reactive loads
- Suitable for delta connection for 3-phase applications



Technical specification	
Operating voltage	500V rms max.
Line frequency	50/60Hz
Insulation resistance	100MΩ min 500V dc
Capacitance	0.1µF ± 1%
Resistance	100Ω ± 5% 4W
Temperature range	-40° to +70°C
DIN rail mounting:	

Top hat	EN50022, DIN 46277-3 BS5584
G profile	EN50035, DIN 46277-1 BS5825
Dimensions	62(L) x 43(H) x 19(W)mm

Type	Order code	1+
Delta suppressor	26-5906	6.99



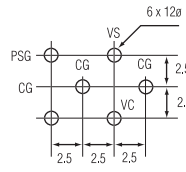
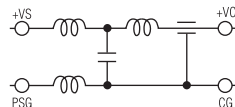
### Standard DC power filters

Compact PCB mounting DC power filters incorporating a four terminal capacitor, feed through capacitor and ferrite bead inductors providing excellent attenuation over a very wide frequency from 1MHz to 1GHz.

- Suitable for applications where high currents and efficient filtering is required, such as digital equipment, output stages of switching power supplies etc.



Technical specification	
Voltage rating	50V DC
Test voltage	125V DC
Current rating	BNX002-01 10A DC max. BNX005-01 15A DC max.
Typical attenuation (50Ω)	1MHz 50dB 10MHz 75dB 100MHz 85dB
Temperature range	-30°C to +85°C
Dimensions	1300(H) x 12.0(W) x 11.0(D)mm



Type	Order code	1+	10+	25+	50+
BNX002-01	26-6010	3.47	3.01	2.81	2.55
BNX005-01	26-6015	4.94	4.42	3.95	3.31



### PI Type filter blocks

Two circuit PI type PCB mounting filter incorporating ferrite bead inductors and feed through capacitors suitable for multiple supply lines.

- Excellent attenuation over a wide frequency range from 15MHz to 1GHz
- Applications include suppression of noise in signal lines, digital and computer equipment



Technical specification	
Voltage rating	500V DC
Test voltage	300V DC
Current rating	10A DC
Number of circuits	2
Dimensions	12.0(L) x 11.0(W) x 12.0(H)
Operating temperature range	-40°C to +100°C

Type	Order code	1+	10+	25+	50+
BNPO02-02	26-6020	2.85	2.65	2.50	2.40



### Snap-on ferrite cores

Snap-fit ferrite cores for round cables with diameters from 4mm to 19mm.

- Provide common-mode filtering for multi-strand, and differential-mode filtering for single conductors
- UL94-V0 rated polypropylene cases



Order code	Max cable dia. mm	mm				Typical impedance Ω		
		A	B	C	D	10MHz	25MHz	100MHz
26-2600	5.3	12.8	5.1	25	5.6	60	100	180
26-2602	5.3	17.3	5.1	36.2	8.4	100	169	280
26-2604	7	20	6.6	39.4	9.78	113	188	310
26-2606	10.5	23.7	10.2	39.4	11.7	81	144	240
26-2610	19	29.2	18.8	42	14.7	69	125	220

A=width, B=core diameter, C=Overall length, D=height (open)

Type	Order code	1+	10+	50+	100+
Core 5.3mm/180R	26-2600	1.62	1.52	1.48	1.39
Core 5.3mm/280R	26-2602	2.60	2.50	2.40	2.30
Core 7.0mm	26-2604	2.55	2.45	2.30	2.19
Core 10.5mm	26-2606	4.79	4.59	4.39	4.23
Core 19.0mm	26-2610	4.65			



### Transguard high speed transient suppressors

Compact high energy multilayer transient suppressors in two popular SMD case sizes.

- These devices provide an ultrafast clamping time of less than 1ns for low voltage DC applications
- Supplied on 8mm tape



Technical specification	
Dimensions	3.2 x 1.6 x 1.02mm
Working voltage (V)	Breakdown voltage (V) Clamping voltage (max VC (V))
	Peak current max Ip (A) Transient energy max (ETRAN (J))
	Cap. inductance nF nH AVX part no.
	Order code

<b>1206 case</b>	
5.6	7.1-8.7 15.5 150 0.4 3 1.7
14	16.5-20.3 30 40 0.1 0.6 1.7
	VC120605D150 26-6170
	VC120614A300 26-6175

Working voltage	Order code	1+	25+	100+	500+
5.6V	26-6170	0.119			
14.0V	26-6175	0.51	0.3978	0.3162	0.255

**MICROTHERM**

**NTC Inrush limiters**

NTC thermistors designed to limit current flow to a low value when equipment is first switched on.

- Protects against high inrush currents in power supplies, lighting circuits, motors, etc. and are ideal for general 'soft start' techniques
- Operating temperature -40°C to +170°C



Technical specification

Zero power resistance	Steady state current max.	Resistance approx. @ max. current	Thermal dissipation constant	Thermal time	Dia. (mm)	Width (mm)	Pitch (mm)	Order code
120Ω	1A	2.29Ω	14mW/°C	35s	10	5	5	<b>26-7604</b>
20Ω	2A	0.604Ω	16mW/°C	45s	10	5	5	<b>26-7606</b>
2.5Ω	5A	0.1Ω	13mW/°C	35s	10	5	5	<b>26-7608</b>
5Ω	5A	0.12Ω	13mW/°C	68s	13	6	7.5	<b>26-7610</b>

Type	Order code	1+	25+	100+	250+
120Ω 1A Limiter	<b>26-7604</b>	0.77	0.663	0.561	0.51
2.5Ω 5A Limiter	<b>26-7608</b>	0.77	0.663	0.561	0.51

**Joyin**

**Metal oxide varistors**

A comprehensive range of voltage dependent metal oxide varistors for suppressing mains borne transients, spikes etc.

- Epoxy coated disc construction with radial leads
- When the protected equipment or circuit encounters a high voltage spike the varistor charges impedance from its normal high standby value to a very low conducting value thus clamping the transient voltage to a protective level
- Varistor absorbs the unwanted high voltage pulse protecting voltage sensitive components against damage
- UL approved



Technical specification

Response time	25ns		
Voltage coefficient/temperature	-0.5%/°C		
Insulation resistance	≤1 x 10 <sup>10</sup> MΩ 500V		
Insulation voltage	2500V		
Max. operating voltage	+85°C		
Max. working surface temperature	+115°C		
Package	Dia. max.	H. max.	Pitch
A	6.5	11	5
B	8.4	12	5
C	11.5	15.5	7.5
D	15.6	20.5	7.5
E	21.8	28	10

Maximum Operating voltage (V) AC	Varistor voltage (V)		Maximum clamping voltage (V) at (A)	Withstanding surge current 1 surge (A)	2 surges (A)	Rated power (W)	Energy (J)	Order code		
	Nom	Min								
11	14	18	16	20	36@2.5	250	125	0.02	0.8	<b>26-3115</b>
14	18	22	20	24	43@2.5	250	125	0.02	0.9	<b>26-3120</b>
20	36	33	30	36	65@2.5	500	250	0.05	4.4	<b>26-3135</b>
30	38	47	42	52	93@2.5	250	125	0.02	1.8	<b>26-3140</b>
35	45	56	50	62	110@5	500	250	0.05	5.5	<b>26-3145</b>
50	65	82	74	90	135@10	1200	600	0.25	3.5	<b>26-3150</b>
250	320	390	351	429	650@10	1200	600	0.25	17	<b>26-3225</b>
250	320	390	351	429	650@100	6500	4000	1	130	<b>26-3240</b>
275	350	430	387	473	710@10	1200	600	0.25	20	<b>26-3245</b>
275	350	430	387	473	710@25	2500	1200	0.4	45	<b>26-3250</b>
275	350	430	387	473	710@50	4500	2500	0.6	75	<b>26-3255</b>
300	385	470	423	517	775@10	1200	600	0.25	20	<b>26-3265</b>
300	385	470	423	517	775@50	4500	2500	0.6	80	<b>26-3270</b>

Vmax. operating	Pack style	Order code	1+	100+	1000+
3.9	B	<b>26-3115</b>	0.21	0.1484	0.1134
3.6	B	<b>26-3120</b>	0.049		
4.4	B	<b>26-3135</b>	0.27	0.1802	0.1431
3.9	B	<b>26-3140</b>	0.13	0.0901	0.07
4.6	C	<b>26-3145</b>	0.07		
3.3	B	<b>26-3150</b>	0.14	0.0954	0.0668
4.5	B	<b>26-3225</b>	0.13	0.0848	0.0636
5.6	E	<b>26-3240</b>	0.151		
4.7	B	<b>26-3245</b>	0.10	0.0636	0.0509
5.2	C	<b>26-3250</b>	0.15	0.1007	0.0795
5.3	D	<b>26-3255</b>	0.20	0.1325	0.106
4.9	B	<b>26-3265</b>	0.13	0.0848	0.0636
5.5	D	<b>26-3270</b>	0.20	0.1325	0.106

**TUSONIX**

**SMD Pi-section capacitive filters 4700LF series**

The 4700LF series SMD filters incorporate ceramic tube technology and ferrite inductors to provide high quality (pi) section filtering in a compact, surface-mount package.

- Suppress interference from noise generating components
- Excellent performance
- Tape-and-reel for easy placement
- Excellent solderability
- Reduces PCB component count
- Applications include radio and telecomms, signal processing, disc drives, set-top equipment, sensors and instrumentation
- Reel quantity **1,000 pcs.**



Technical specification

Current rating	10A					
Operating temperature	-55°C to +125°C					
Capacitance	Voltage	Attenuation dB (50Ω system)			Tusonix part No.	Order code
Value	125°C	10MHz	100MHz	1GHz		
1,000pF	100V	7	40	65	<b>4700-005</b>	<b>27-0184</b>
2,000pF	100V	10	45	70	<b>4700-003</b>	<b>27-0188</b>

Type	Order code	1+	10+	50+	100+
1,000pF	<b>27-0184</b>	1.22	0.918	0.816	0.612
2,000pF	<b>27-0188</b>	0.35			

**TUSONIX**

**High current low pass Pi-section filter**

The 4206-0011F bushing filter is designed to suppress unwanted EMI/RFI noise in power circuits where high current ratings are applied.

- Pi-section for better filtering
- 25A current rating
- 1,000V working
- Applications include microwave and telecomms, datacomms, industrial sensors and control systems



Technical specification

Current rating	25A					
Capacitance	Voltage	Attenuation dB (50Ω system)			Tusonix part No.	Order code
value	@ 85°C	10MHz	100MHz	1GHz		
3,000pF	1,000V	10	55	70	<b>4206-0011F</b>	<b>27-0168</b>

Type	Order code	1+	10+	50+	100+
3,000pF	<b>27-0168</b>	5.61	4.74	4.28	3.93

**TUSONIX**

**Chassis mounting Pi-section filters**

The 4209LF series bushing filters combine ceramic capacitor and ferrite inductor technology to provide a chassis mount (pi) filter.

- Suppresses unwanted EMI/RFI in a wide range of applications where a high insertion loss is required
- 5.1mm mounting
- Hex nut and locking washer
- 350V DC working voltage
- Applications include microwave and telecomms, datacomms, industrial sensors and control systems



Technical specification

Current rating	10A					
Voltage rating	85°C 350V					
Capacitance	Voltage	Attenuation (dB) (50Ω system)			Tusonix Part No.	Order code
Value	10MHz	100MHz	1GHz	10GHz		
1,500pF	5	45	70	70	<b>4209-003LF</b>	<b>27-0170</b>
5,500pF	20	65	70	70	<b>4209-053LF</b>	<b>27-0172</b>

Type	Order code	1+	10+	50+	100+
1,500pF	<b>27-0170</b>	3.52	2.96	2.67	2.47
5,500pF	<b>27-0172</b>	3.52	2.96	2.67	2.47

**TUSONIX**

**M3 Subminiature ceramic filters**

The 4400LF series miniature bushing filters incorporate ceramic capacitor technology to provide a chassis-mount feed-through for low pass filtering applications where space is at a premium.

- 3.5mm mounting hole
- Hex nut and locking washer
- M3 thread
- 10A DC current rating
- Applications include microwave and telecomms, datacomms, industrial sensors and control systems



Technical specification

Current rating	10A							
Operating temperature range	-55°C to +125°C							
Capacitance	Voltage	Attenuation dB (50Ω system)			Tusonix part no.	Order code		
Value	85°C	1MHz	10MHz	100MHz	1GHz	10GHz		
1,000pF	300V	-	5	20	35	45	<b>4400-095LF</b>	<b>27-0178</b>
4,700pF	150V	-	15	30	45	55	<b>4400-094LF</b>	<b>27-0176</b>
50,000pF	50V	15	35	45	60	60	<b>4400-099LF</b>	<b>27-0180</b>

Type	Order code	1+	10+	50+
1000pF	<b>27-0178</b>	3.06	2.91	2.30
4700pF	<b>27-0176</b>	1.84		

Type	Order code	1+	10+	50+
50,000pF	<b>27-0180</b>	3.57	3.32	2.91



**Free delivery**

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## TUSONIX

### Ceramic feed-through capacitors

The 2499LF series bushing feed-throughs incorporate ceramic capacitors for low pass filtering where rugged chassis mounting and high current are required.

- Working voltages up to 500V DC
- Hex nut and locking washer
- 20A current handling
- Industry standard size
- Applications include power supplies, power amplifiers, control and process instrumentation



Technical specification					
Current rating	20A				
Voltage rating 85°C	500V				
Capacitance Value	Attenuation dB (50Ω system)	Tusonix part No	Order code		
	10MHz 100MHz 1GHz 10GHz				
100pF	- 5 20 28	2499-003-U2M0-101KLF	27-0160		
1,000pF	3 20 35 40	2499-003-X5U0-102PLF	27-0162		
10,000pF	20 35 50 55	2499-003-X5W0-103ZLF	27-0164		
Type	Order code	1+	10+	50+	100+
100pF	27-0160	2.55	2.09	1.86	1.68
1,000pF	27-0162	2.14	1.76	1.57	1.42
10,000pF	27-0164	1.20			

## muRata

### Three terminal capacitors

Conventional capacitors have a high residual inductance within the lead wires impeding the path of high frequency noise to ground. These three terminal capacitors form a T-filter providing a high inductance in series with the line via two ferrite beads and low inductance to ground via the bypass capacitor.

- Provide excellent attenuation with increased frequency over conventional capacitors
- Applications include noise suppression in office equipment, computers and TV
- Leads are in-line on a 2.5mm pitch
- Dimensions: 50V type, H = 7mm, W = 6mm: 100V and 16V types H = 6mm, W = 8mm
- Lead length 33mm



Technical specification						
Current rating	6A					
Temperature range	-25°C to +85°C					
Capacitance pF	Tolerance	Effective frequency range (50Ω series 20dB min) MHz.	Rated Voltage DC	Ferrite beads	Murata part no.	Order code
270	±20%	400-1000	50	No	DS306-55YSS271M50	26-6132
10000	+80 to -20%	8-1000	50	No	DS306-55FZ103Z50	26-6147
100	±20%	200-1050	100	Yes	DS306-55YSS101M100	26-6182
220	±20%	110-1000	100	Yes	DS306-55YSS221M100	26-6187
270	±20%	90-1000	100	Yes	DS306-55YSS271M100	26-6192
470	±20%	70-1000	100	Yes	DS306-55YSS471M100	26-6197
1000	±20%	20-1000	100	Yes	DS306-55YSS102M100	26-6202
10000	±30%	7 to 1000	100	Yes	DS306-55FZ103N100	26-6212

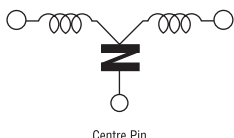
Value (pF)	Order code	1+	25+	100+	500+
<b>50V</b>					
270	26-6132	0.29	0.2652	0.2142	0.204
10000	26-6147	0.24	0.1938	0.1734	0.1601
<b>100V</b>					
100	26-6182	0.33	0.2448	0.204	0.1816
220	26-6187	0.33	0.2448	0.204	0.1816
270	26-6192	0.33	0.2448	0.204	0.1816
470	26-6197	0.33	0.2448	0.204	0.1816
1000	26-6202	0.33	0.2448	0.204	0.1816
10000	26-6212	0.36	0.27	0.226	0.201

## muRata

### T-Network varistor

A three terminal miniature T-network varistor comprising a capacitor linked to two internal ferrite bead inductors designed to eliminate noise and protect sensitive semiconductors.

- Pins on 2.5mm pitch
- Dimensions 8.0(W) x 10.5(H) x 2.54(D)mm



Technical specification				
Varistor voltage	25V DC	Capacitance	220pF ±20%	
Rated voltage	50V DC	Temperature range	-40°C to +105°C	
Rated current	6A	Murata type	DSS706-351D221M25-50	
Peak pulse current	100A			
Type	Order code	1+	25+	100+
T-Network varistor	26-3850	0.51	0.3672	0.3264

## Integrated Circuits section

### TC65T Wireless terminal starter kit



A high-performance plug-in and play device

ONLY £135.95

## RVFM

### Ferrite beads

A ferrite bead manufactured in A5 material for placing on insulated cables or formed wire leads to obtain a desired value of inductance.

- Dimensions 3.5mm diameter, 4.0mm long with centre hole 1.2mm diameter
- Applications include high frequency suppression in low impedance circuits



Type	Order code	1+	100+	1000+	5000+
Ferrite bead	23-0730	0.06	0.0265	0.017	0.0127

## muRata

### Bead inductors

Ferrite bead inductors offered in both radial and axial lead versions.

- Provides noise suppression over a frequency range of 9-900MHz at 7A



Technical specification					
Dimensions	Axial type	Radial type			
Lead pitch	5 x 3.6mm dia	8.4 x 15mm (H)			
Effective frequency range (Z = 50Ω)	-	5.0 ±0.8			
Current rating	12MHz - 1GHz	20MHz - 1GHz			
Murata part No.	7A	6A			
Order code	BLO1RN1-A62	BLO2RN2-R62			
	26-4860	26-4865			

Type	Order code	1+	50+	100+	500+
Axial inductor	26-4860	0.10	0.0816	0.0704	0.0653
Radial inductor	26-4865	0.143	0.121	0.107	0.099

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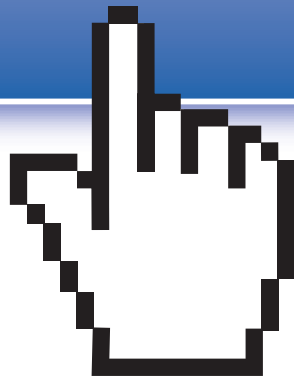
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