



Product Overview

This product is manufactured from a synthetic polyester or nylon yarn which is plated to give electrical conductivity over the surface of the fibre and then woven in a traditional way so as to produce a conductive cloth. The cloth is then slit and wrapped over a soft polyether polyurethane foam core in a range of profiles and results in an economically priced conformable conductive gasket strip suitable for many applications.

Applications

The versatility of Conductive Fabric Over Foam and the huge variety of profiles available makes the product suitable for a wide range of applications where full EMC screening is required between component parts especially in high cycling and wiping applications and where low compression and excellent abrasion resistance are considerations.

Typical applications include:

- Cabinet doors
- Panel gaskets
- Grounding contacts
- Card cage gaskets
- Connector and I/O gaskets.

Availability

Profiles are available in 2100mm lengths with some obtainable in continuous length. Depending on the profile the product can be:

- Cut to length
- Die cut to form fabricated gaskets
- Notched for 90 degree fabrication
- Mitred
- Supplied with clip on and edge mounting or with self-adhesive backing
- Have fire resistant properties to UL94 V-0
- Compression between 10% and 70%.

Design Considerations

- Whilst a limited dust seal can be achieved, additional environmental sealing, if needed, is required.
- Consideration must be given to compression forces and corrosion compatibility.
- Consider the minimum land area on die cut parts, we would suggest that it is equal to the thickness of the material.

Production Capability

Kemtron holds large stocks of Conductive Fabric Over Foam profiles, which can be supplied to customers off the shelf or die or kiss cut or fabricated to their requirements. Gasket fabrication is a routine feature of our work enabling us to produce economic gaskets by maximising material usage, using a range of in-house cutting and stamping equipment, which is suitable for prototype, short and medium production runs, up to commercial quantities.



Ordering Information

| E xx | x | х | x | xxxxx |
|---------|------|--------|-------------------------------|--------|
| Profile | Foam | Fabric | Finishing / Attachment System | Length |

Profile Guide

Select from list

Foam

| 1 = | UL94 H-B |
|-----|--|
| 5 = | UL94 V-0 Bromine free |
| 7 = | UL94 V-O Recognised soft foam under the component program of Underwriters Laboratories Inc. In specified claddings and thickness. |

Fabric

| 3 = | Nickel / Copper C70 (Polyester Ripstop) |
|-----|---|
| 4 = | Nickel / Copper C12 (Polyester Woven) |
| 9 = | Silver C2 (Nylon Ripstop) |

Finishing / Attachment System

| -= | No pressure sensitive adhesive |
|----------------|--|
| E = | Die cut |
| N = | Narrow tape |
| H = | High shear PSA |
| C = | PSA in the centre |
| P = | PSA on inside leg |
| Z = | Wide release liner |
| 2Z / 2T / 2H = | 2 rows PSA on the same side |
| A = | PSA on adjacent side |
| B = | PSA on back side |
| T = | PSA |
| L = | PSA on lead edge or opposite seam side |
| W = | Wide PSA |
| K = | Kiss cut + PSA |
| D = | Conductive PSA for mechanical reasons |

Length example

| 08400 = | 84" | | |
|---------|-----|--|--|
| 04800 = | 48" | | |

^{*} In inches; 00000 if continuous

| Fabric | Nickel/Copper C12 (Polyester Woven) | Nickel/Copper C70 (Polyester Ripstop) | Silver C2 (Nylon Ripstop) |
|---|--|--|------------------------------|
| Shielding Effectiveness MIL-DTL 83528C (20 MHz - 10 GHz) Test Gasket - 6.4mm x 9.5mm | 97.4 dB | 96 dB | 95 dB |
| Surface Resistivity ASTM F390 Modified | 0.02_ | 0.066_ | 0.05_ |
| Abrasion Resistance ASTM D3886 | 1,000,000 | 800,000 | 800,000 |

| | Cycles | Cycles | Cycles |
|--|--------|--------|--------|
| Contact Resistance Schlegel LP-3001 1kg load at 25.4mm | 0.08 | 0.11 | <1.0 |
| Compression set 70°C at 50% compression for 22 hours | <5% | <5% | <5% |

Notice

Information supplied in these data sheets is based on independent and laboratory tests which Kemtron believes to be reliable. Kemtron has no control over the design of customer's product which incorporates Kemtron's products, therefore it is the responsibility of the user to determine the suitability for his particular application and we recommend that the user make his own test to determine suitability.

The product described in this data sheet shall be of standard quality, however the products are sold without warranty of fitness for a particular purpose, either expressed or implied, except to the extent expressly stated on Kemtron's invoice, quotation or order acknowledgement. Kemtron does not warrant that products described in this data sheet will be free of conflict with existing or future patents of third parties. All risks of lack of fitness, patent infringement and the like are assumed by the user.



Rectangular Sections

| Height | Width Profile Code |
|--------|--------------------|
| 0.5mm | 4.0mm E83 |
| 0.5mm | 5.0mm E59 |
| 0.5mm | 6.0mm ES1 |
| 0.5mm | 7.0mm E88 |
| 0.5mm | 10.0mm E91 |
| 0.5mm | 15.0mm EU1 |
| 0.5mm | 17.0mm ES2 |
| 0.5mm | 22.5mm ET8 |
| 1.0mm | 3.0mm E37 |
| 1.0mm | 4.0mm E03 |
| 1.0mm | 5.0mm E12 |
| 1.0mm | 7.0mm E06 |
| | 10.0mm E11 |
| | 11.0mm ET3 |
| | 13.0mm E99 |
| | 13.6mm ET4 |
| | |
| | 15.0mm EJ6* |
| | 16.0mm ET5 |
| | 18.0mm E39 |
| | 25.4mm E29 |
| 1.0mm | 41.3mm EC5* |
| 1.2mm | 8.0mm E97* |
| 1.5mm | 3.8mm EN6 |
| 1.5mm | 5.0mm ED9 |
| 1.5mm | 7.0mm E61 |
| 1.5mm | 10.0mm EG2 |
| 1.5mm | 14.0mm EB5 |
| 1.5mm | 16.2mm ET7 |
| 1.5mm | 27.0mm EA8* |
| 2.0mm | 2.5mm EU2 |
| 2.0mm | 3.0mm EU4 |
| 2.0mm | 4.0mm E81 |
| 2.0mm | 7.0mm E77 |
| 2.0mm | 7.5mm EC7* |
| | 10.0mm E08 |
| | 12.7mm E24 |
| | 17.5mm ED3 |
| | 18.0mm EN8 |
| | 19.0mm EG7* |
| | 21.0mm E58 |
| | 21.0mm EH4* |
| | |
| | 28.6mm E09* |
| | 41.3mm E07* |
| | 50.0mm E30* |
| 3.0mm | 2.0mm EU5 |
| 3.0mm | 3.0mm E18 |
| 3.0mm | 4.0mm E01 |
| 3.0mm | 5.0mm EM8 |
| 3.0mm | 7.0mm ES5 |
| 3.0mm | 16.0mm ES6 |
| 3.0mm | 25.4mm E44 |
| 3.0mm | 40.9mm EC6* |
| 3.0mm | 43.0mm ED5* |
| 3.2mm | 6.4mm E70 |
| 3.2mm | 9.5mm EQ1 |
| | 9.5mm E62 |

| Height | Width | Profile Code |
|--------|--------|--------------|
| 3.2mm | 12.7mm | E28 |
| 3.2mm | 17.5mm | EM7* |
| 3.2mm | 19.0mm | EN9* |
| 3.2mm | 20.2mm | EM9* |
| 3.3mm | 4.8mm | E74 |
| 3.7mm | 21.0mm | E65 |
| 4.0mm | 4.0mm | EB4 |
| 4.0mm | 8.0mm | EP6 |
| 4.0mm | 10.0mm | EN1 |
| 4.0mm | 15.0mm | E78 |
| 4.6mm | 41.3mm | E47* |
| 5.0mm | 5.5mm | EN2 |
| 5.0mm | 8.0mm | E73 |
| 5.0mm | 9.0mm | EJ7 |
| 5.0mm | 12.0mm | ES7 |
| 5.0mm | 14.5mm | EP2 |
| 5.1mm | 5.1mm | E14 |
| 5.1mm | 6.4mm | EP8 |
| 5.5mm | 10.0mm | EN3 |
| 6.0mm | 6.0mm | E79 |
| 6.0mm | 6.5mm | EN4 |
| 6.0mm | 8.0mm | EJ4 |
| 6.0mm | 25.4mm | ES8 |
| 6.2mm | 22.0mm | ESS |
| 6.2mm | 28.5mm | ET1 |
| 6.4mm | 9.5mm | E66 |
| 6.4mm | 12.7mm | E25 |
| 6.4mm | 41.3mm | EG9* |
| 6.5mm | 10.0mm | EN5 |
| 6.5mm | 14.5mm | EP3 |
| 7.0mm | 7.0mm | EPS |
| 7.5mm | 15.0mm | E05* |
| 8.0mm | 8.0mm | EG8 |
| 9.5mm | 9.5mm | E63 |
| 9.5mm | 12.7mm | E68 |
| 9.5mm | 20.0mm | E84* |
| 9.5mm | 25.4mm | E20* |
| 10.0mm | 10.0mm | EP5* |
| 11.5mm | 10.5mm | E80 |
| 15.9mm | 25.4mm | E75* |
| 17.0mm | 17.0mm | E49* |
| 25.0mm | 20.0mm | E36* |



Wedge







E60 3.3mm x 13.2mm .130" x .402"

EA7* 11.4mm x 16.0 0mm .448" x .630"

E52* 4.00mm x 8.2mm .157" x .324"

Self-Mounting









E93* 2.5mm x 8.4mm .100" x .330"

EB9 3.7mm x 6.5mm .145" x .256"

E86* 18.8mm x 9.7mm .740" x .380"

E27* 16.2mm x 5.8mm .638" x .230"

Knife Edge











E96 2.7mm x 8.0 0mm .106" x .315"

E67 2.7mm x 11.3mm .106" x .445"



E31 2.mm x 11.3mm .106" x .445"

E19* 6.4mm x 19.1mm .250" x .750"

L Shape









EA2* 3.8mm x 10.2mm .150" x .400"

ED2* 5.00mm x 8.5mm .197" x .335"

E13* 5.5mm x 12.00mm .217" x .472"

E48* 7.9mm x 18.6mm .312" x .731"

Bell Shaped



U-Fold

EU7 2.5mm x 7.6mm .098" x .300"

ET2 3.00mm x 8.00mm .118" x .315"

EG5 9.5mm x 12.7mm .374" x .500"



T-Shape













ED4* 3.9mm x 6.00mm .152" x .235" **ED1*** 4.00mm x 6.2mm .157" x .244" **EA9** 4.00mm x 6.2mm .157" x .244" **EJ2** 4.00mm x 6.2mm .157" x .224" **EQ2*** 4.8mm x 6.4mm .190" x .250" **E41*** 5.1mm x 4.8mm .200" x .190"







EH8* 10.00mm x 10.00mm .395" x .395"

C-Fold



E56* 6.1mm x 7.4mm .240" x .292"



EB6* 6.1mm x 7.4mm .240" x .292"



E21 6.4mm x 5.9mm .250" x .234"



EC3 6.4mm x 7.1mm .250" x .280"



EH3 8.00mm x 8.00mm .315" x .315"



EG3* 9.8mm x 10.7mm .385" x .420"



EM4* 9.8mm x 10.7mm .385" x .420"



E98 9.8mm x 10.7mm .385" x .420"



E98 Riveted* 9.8mm x 10.7mm .385" x .420"



EH9* 9.8mm x 10.7mm .385" x .420"



E55* 9.8mm x 12.2mm .385" x .480"



E40 10.00mm x 10.9mm .385" x .430"



ED8* 11.4mm x 16.00mm .448" x .630"



E85 11.8mm x 10.7mm .465" x .420"



EP7 11.8mm x 10.7mm .465" x .420"



E32 17.1mm x 14.7mm .675" x .580"



ED8* 18mm x 14.2mm .710" x .560"



E85 23.9mm x 14.00mm .940" x .550"

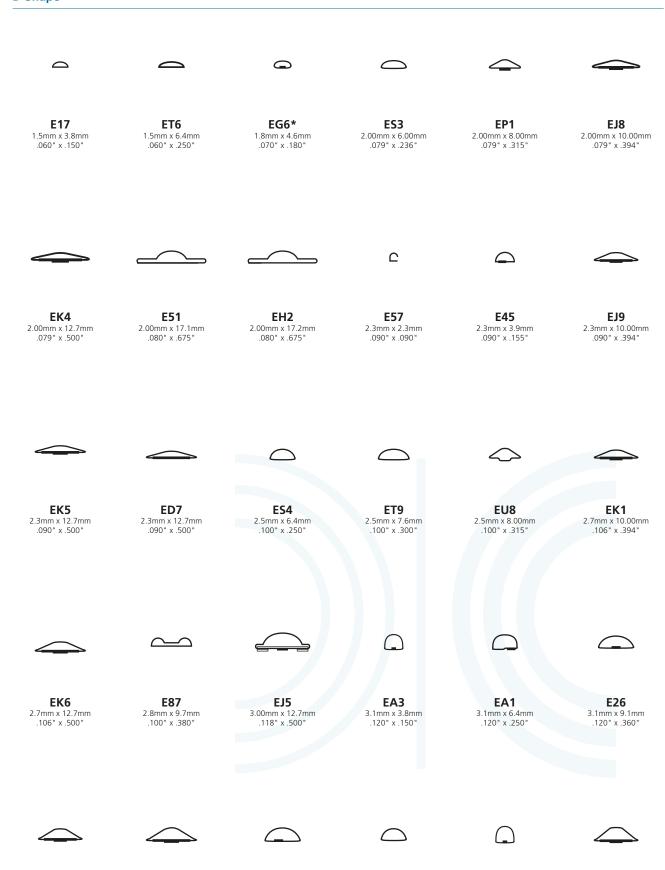


D-Shape

EK2

3.3mm x 10.00mm .130" x .394" EK7

3.3mm x 12.7mm .130" x .500"



EK3 3.8mm x 10.00mm .150" x .394"

E90

3.6mm x 6.4mm .140" x .250" EG4

3.8mm x 3.8mm .150" x .150"

EM6

3.5mm x 9.5mm .140" x .375"



D-Shape













EK8 3.8mm x 12.7mm .150" x .500"

EA5 4.00mm x 6.00mm .156" x .236"

E35 4.00mm x 7.4mm .156" x .292"

E43* 4.00mm x 7.4mm .156" x .292"

EH1 4.00mm x 12.7mm .157" x .500"

EH7 4.00mm x 12.7mm .157" x .500"













EM3* 4.00mm x 12.7mm .157" x .500"

E50* 4.3mm x 9.7mm .170" x .380"

EM5 4.3mm x 9.7mm .170" x .380"

4.7mm x 12.2mm .185" x .480"

E64*

EB1* 4.7mm x 12.2mm .185" x .480"

E04 4.8mm x 7.6mm .189" x .300"













E50* 5mm x 17.2mm .197" x .675"

EM2* 5.00mm x 17.2mm .197" x .675"

EJ1 5.5mm x 12.7mm .217" x .500"

E10 6.4mm x 9.5mm .250" x .375"

EA6* 6.4mm x 9.5mm .250" x .375"

EP4 8.4mm x 10.00mm .335" x .394"



EH5 9.53mm x 12.7mm .375" x .500"