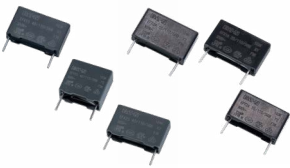




# Eaton offers standard and automotive-grade film safety and film DC-link Capacitors for electronic applications



Eaton's film safety capacitors are constructed using metalized polypropylene film encapsulated with a self-extinguishing resin in a case meeting UL94V-0 requirements.

### Product description

Eaton's film safety (also known as film EMI suppression) capacitors are constructed using metalized polypropylene film encapsulated with a self-extinguishing resin in a plastic case meeting UL94V-0 requirements. Class X1/X2 products are offered in many sizes, lead lengths, and terminal configurations, in a standard (commercial grade) offering for each class. Eaton also offers automotive-grade film safety capacitors of the same construction.

Eaton film DC-link capacitors are constructed using metalized polypropylene film encapsulated with epoxy resin in a plastic case with 2 terminal or 4 terminal tinned plated copper wire. This standard offering is a commercial grade product suitable for high-performance DC filtering applications. Eaton also offers automotive-grade film DC-link capacitors of the same construction.

### Features and benefits

Eaton film safety (standard & automotive-grade)

- High stability capacitance
- Operating temperature rating: -40° C to +110 °C
- Self-healing property
- Overvoltage stress withstanding
- Flame-retardant plastic case and resin
- THB Grade IIIB and AEC-Q200 qualified for the automotive grade family
- Approvals: UL/cUL, VDE/ENEC, CQC

### Features and benefits

Eaton film DC-link (standard & automotive grade)

- Capacitance range: 1 uF to 200 uF
- Operating temperature rating: -40/-55 °C to +105 °C
- Voltage rating: 450 Vdc to 1200 Vdc
- High ripple current
- Low loss and low ESL
- THB Grade IIIB and AEC-Q200 qualified for the automotive grade family
- Flame-retardant plastic case and resin

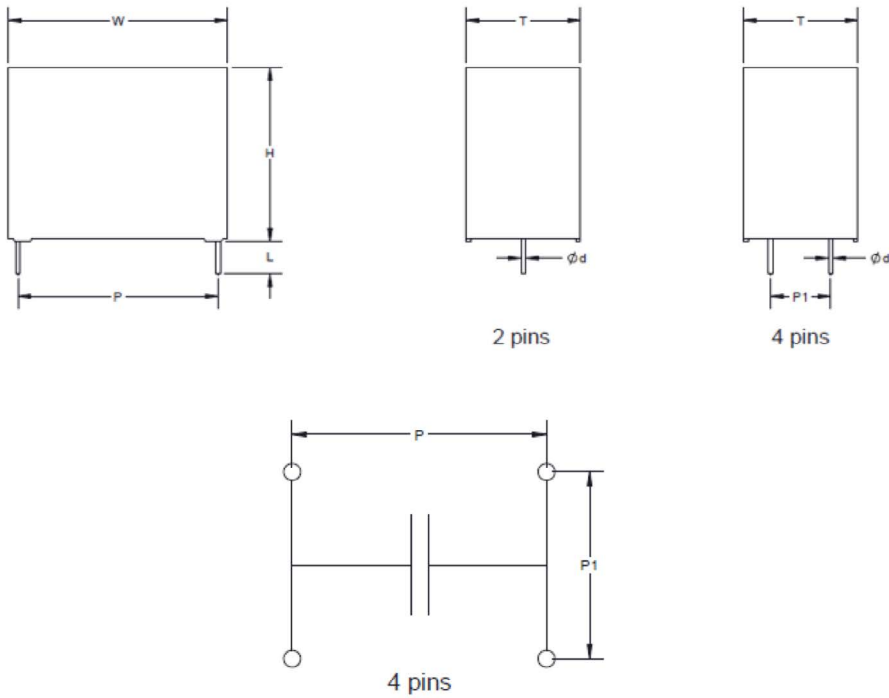
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## Product specifications

Product number	Product type	Capacitance range	Voltage rating	Operating temperature	THB Grade IIIB qualified	AEC-Q200 qualified
EFDKS	DC Link	1 $\mu$ F to 200 $\mu$ F	450 Vdc to 1200 Vdc	-40 °C to +105 °C		
EFDKA	DC Link	1 $\mu$ F to 200 $\mu$ F	450 Vdc to 1200 Vdc	-55 °C to +105 °C	X	X
EFX1S	X1, Safety	0.01 $\mu$ F to 5.6 $\mu$ F	480 Vac/1000 Vdc	-40 °C to +110 °C		
EFX1A	X1, Safety	0.01 $\mu$ F to 1.8 $\mu$ F	480 Vac/1000 Vdc	-40 °C to +110 °C	X	X
EFX2S	X2, Safety	0.1 $\mu$ F to 15 $\mu$ F	305 Vac/630 Vdc	-40 °C to +110 °C		
EFX2A	X2, Safety	0.1 $\mu$ F to 15 $\mu$ F	305 Vac/630 Vdc	-40 °C to +110 °C	X	X

## Mechanical parameters, schematic, pad layout (mm)



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