

# Surface mount fast-acting fuses support PoE++ specifications for RJ45 connectors



The 0603HV provides overcurrent protection for high-voltage applications.

## Product description

Eaton Bussmann series 0603HV fuses meet and exceed the higher voltage level requirements for circuit protection in PoE++ (Power over Ethernet) applications that utilize RJ45 connectors. These fast-acting fuses provide overcurrent protection to safeguard electronic circuits in a host of PoE++ applications, such as VoIP phones, IP cameras, Wi-Fi/RFID readers, and more.

Designed in a small form factor, Eaton's 0603HV fuses are suitable for use in space constrained applications. These surface mount fuses have excellent temperature tolerance and come in a tape and reel packaging comprising durable materials for rugged operation. Each product is lead free, halogen free, and RoHS compliant.

## Features and benefits:

- Compact design: 0603 (1608 metric) surface mount package
- Robust cycling performance
- Reliable operation in temperatures ranging from -55° C to +125° C
- Highest voltage interrupt rating (63 V) in the 0603 sizes
- Halogen and lead free, RoHS compliant, and UL recognized
- Solder-free design



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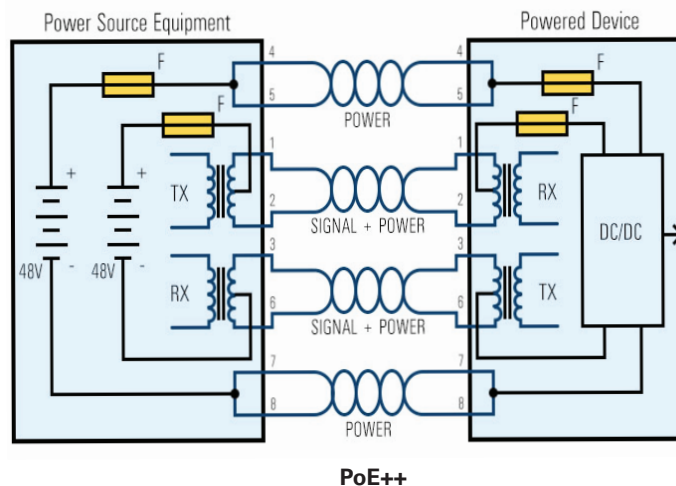
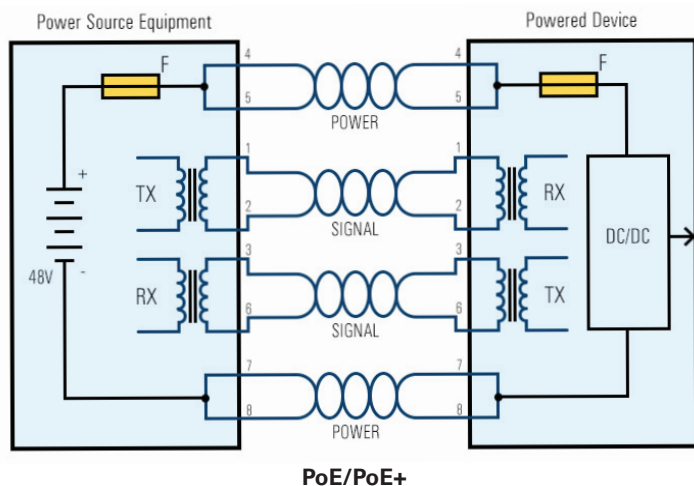
## Electrical characteristics

Amp Rating	% of Amp Rating	Opening Time
500 mA – 1.5 A	100%	4 hours minimum
500 mA – 1.5 A	200%	60 seconds maximum

## Product specifications

Part Number <sup>5</sup>	Current rating (A)	Voltage rating (V <sub>dc</sub> )	Interrupting rating <sup>1</sup> (A)	Typical DC cold resistance <sup>2</sup> (mΩ)	Typical pre-arcing <sup>3</sup> I <sup>2</sup> t (A <sup>2</sup> s)	Typical voltage drop (mV)	Part marking
0603HV500-R	0.5	63	50	1.025	0.0019	0.6	F
0603HV750-R	0.75	63	50	0.51	0.003	0.50	G
0603HV1-R	1	63	50	0.15	0.007	0.211	H
0603HV1.25-R	1.25	63	50	0.132	0.008	0.201	J
0603HV1.5-R	1.5	63	50	0.132	0.0319	0.138	K

- DC interrupting rating measured at rated voltage, time constant less than 50 microseconds, battery source
- DC cold resistance measured at <10% of rated current
- Typical pre-arcing I<sup>2</sup>t measured with a battery bank at rated dc voltage, 10x-rated current, not to exceed IR, time constant of calibrated circuit less than 50 microsecond
- Typical voltage drop measured at rated current after temperature stabilizes
- Part Number Definition: 0603HVxxx-R  
 0603HV = Product code and size  
 xxx - Ampere rating  
 -R suffix = RoHS compliant



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