

# High Speed Fuses

## Ferrule — FWA 150V: 5-60A

### FWA 5-30A (10 x 38mm) 35-60A (21 X 51mm)

#### Specifications

**Description:** Ferrule style high speed fuses.

**Dimensions:** See Dimensions illustration.

#### Ratings:

Volts: — 150Vac/150Vdc

Amps: — 5-60A

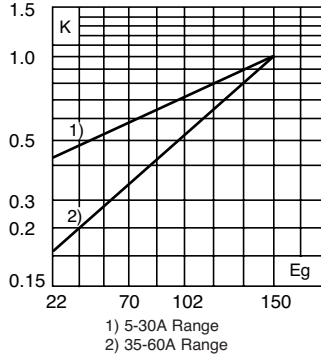
IR: — 100kA Sym.

**Agency Information:** CE, UL Recognition

#### Electrical Characteristics

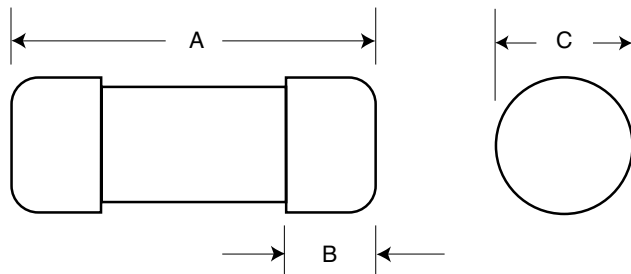
##### Total Clearing I<sup>2</sup>t

The total clearing I<sup>2</sup>t at rated voltage and at power factor of 15% are given in the electrical characteristics. For other voltages, the clearing I<sup>2</sup>t is found by multiplying by correction factor, K, given as a function of applied working voltage, E<sub>g</sub>, (rms).



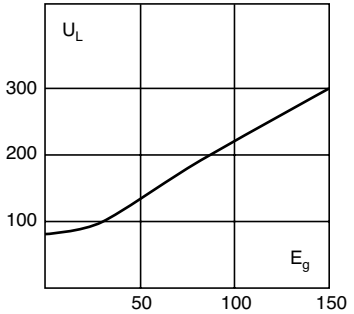
#### Dimensions - in (mm)

Amp Range	Dimensions		
	A	B	C
5-30	1.5 (38.1)	0.375 (9.5)	0.406 (10.3)
35-60	2.0 (50.8)	0.625 (15.9)	0.811 (20.6)



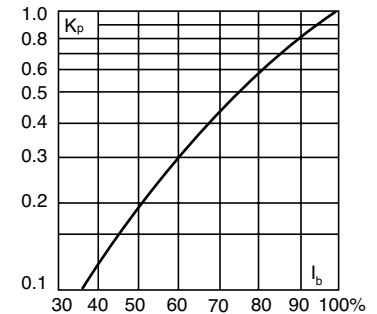
#### Arc Voltage

This curve gives the peak arc voltage, U<sub>L</sub>, which may appear across the fuse during its operation as a function of the applied working voltage, E<sub>g</sub>, (rms) at a power factor of 15%.



#### Power Losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the power losses at load currents lower than the rated current. The correction factor, K<sub>p</sub>, is given as a function of the RMS load current, I<sub>b</sub>, in % of the rated current.



#### Catalog Numbers

Catalog Numbers	Size	Electrical Characteristics			
		Rated Current RMS-Amps	I <sup>2</sup> t (A <sup>2</sup> Sec)		Watts Loss
			Pre-arc	Clearing at 150V	
FWA-5A10F	10 x 38mm ( <sup>1</sup> / <sub>2</sub> " x 1 <sup>1</sup> / <sub>2</sub> " )	5	1.6	8	1
FWA-10A10F		10	3.6	16	2.7
FWA-15A10F		15	14	55	3.3
FWA-20A10F		20	33	130	3.8
FWA-25A10F		25	58	220	4.9
FWA-30A10F	30	100	400	4.9	
FWA-35A21F	21 x 51mm ( <sup>1</sup> / <sub>2</sub> " x 2" )	35	75	800	4.5
FWA-40A21F		40	100	1000	5.1
FWA-45A21F		45	130	1300	6
FWA-50A21F		50	170	1600	7.3
FWA-55A21F		55	210	2100	8.0
FWA-60A21F		60	250	2400	8.0

• Watts loss provided at rated current.  
• See accessories on page 211.

#### Features and Benefits

- Excellent cycling capability and dc performance
- Low arc voltage and low energy let-through (I<sup>2</sup>t)
- Low watts loss in a compact size
- Used with finger-safe holders/blocks

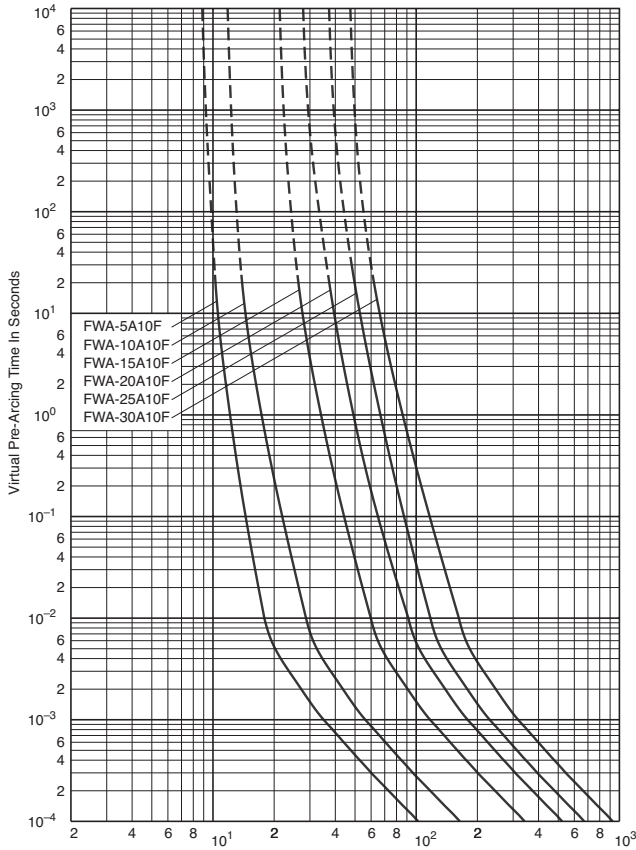
#### Typical Applications

- DC common bus
- DC drives
- Power converters/rectifiers
- Reduced voltage starters

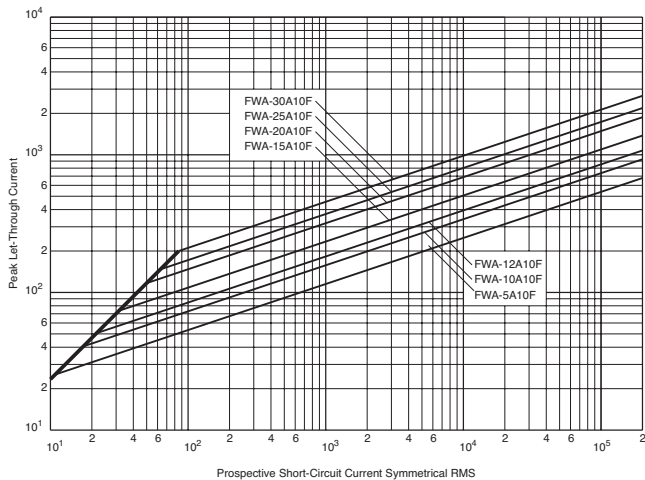
## Ferrule — FWA 150V: 5-60A

### FWA 5-30A: 150V (10 x 38mm)

Time-Current Curve



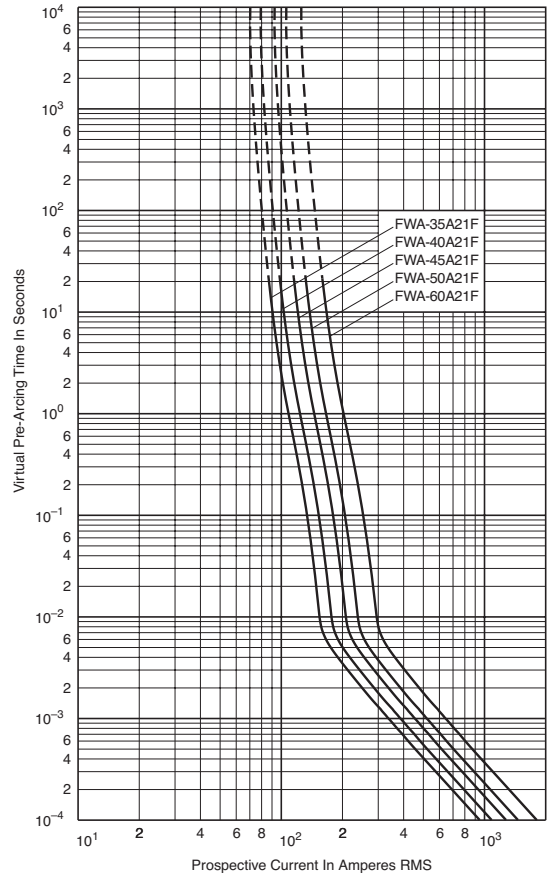
Peak Let-Through Curve



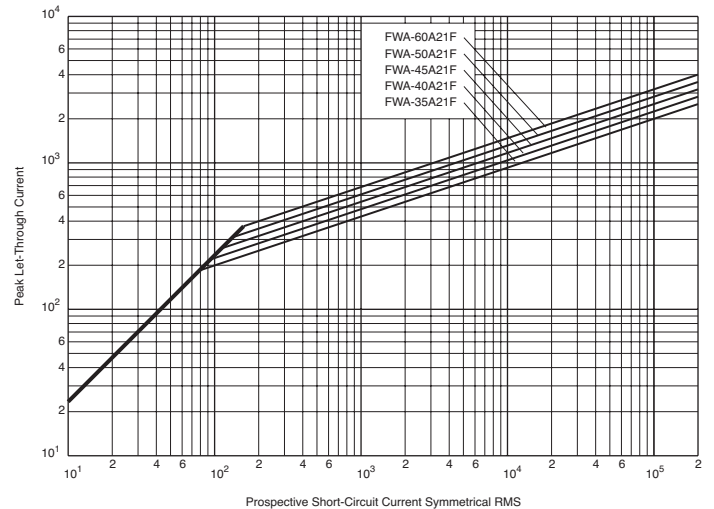
Data Sheet: 35785317

### FWA 35-60A: 150V (21 x 51mm)

Time-Current Curve



Peak Let-Through Curve



Data Sheet: 35785305

High Speed Fuses