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With the principle of "Quality Parts,Customers Priority,Honest Operation, and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!


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Ferrule - FWA 150V: 5-60A

## FWA $5-30 A(10 \times 38 \mathrm{~mm})$ <br> 35-60A (21 X 51 mm )

## Specifications

Description: Ferrule style high speed fuses.

Dimensions: See dimensions illustration.
Ratings:
Volts: - 150Vac/dc
Amps: - 5-60A
IR: - 100kA Sym.
Agency Information: CE, UL Recognition

## Electrical Characteristics

## Total Clearing $I^{2} t$

The total clearing $\mathrm{I}^{2 t}$ at rated voltage and at power 1.0 factor of $15 \%$ are given in the electrical characteristics. For other 0.5 voltages, the clearing $l^{2} t$ is found by multiplying by correction factor, K, given as a function of applied working voltage, $\mathrm{E}_{\mathrm{g}}$, (rms).


Dimensions - in (mm)

| Amp | Dimensio |  |  |
| :---: | :---: | :---: | :---: |
| Range | 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, $\mathrm{U}_{\mathrm{L}}$, which may appear across the fuse during its operation as a function of the applied working voltage, $\mathrm{E}_{\mathrm{g}}$, (rms) at a power factor 100 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, $\mathrm{K}_{\mathrm{p}}$, is given as a function of the RMS load current, $\mathrm{l}_{\mathrm{b}}$, in \% of the rated current.


## Catalog Numbers

| Catalog <br> Numbers | Size | Electrical Characteristics |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Rated Current RMS-Amps | $1^{2} \mathrm{t}$ ( $\mathrm{A}^{2} \mathrm{Sec}$ ) |  | Watts Loss |
|  |  |  | Pre-arc | Clearing <br> at 150 V |  |
| FWA-5A10F |  | 5 | 1.6 | 8 | 1 |
| FWA-10A10F |  | 10 | 3.6 | 16 | 2.7 |
| FWA-15A10F | $10 \times 38 \mathrm{~mm}$ | 15 | 14 | 55 | 3.3 |
| FWA-20A10F | $\left(13 / 32^{\prime \prime} \times 1 / 2^{\prime \prime}\right)$ | 20 | 33 | 130 | 3.8 |
| FWA-25A10F |  | 25 | 58 | 220 | 4.9 |
| FWA-30A10F |  | 30 | 100 | 400 | 4.9 |
| FWA-35A21F |  | 35 | 75 | 800 | 4.5 |
| FWA-40A21F |  | 40 | 100 | 1000 | 5.1 |
| FWA-45A21F |  | 45 | 130 | 1300 | 6 |
| FWA-50A21F | (16 $\times 2$ ) | 50 | 170 | 1600 | 7.3 |
| FWA-60A21F |  | 60 | 250 | 2400 | 8.0 |

- Watts loss provided at rated current.
- See accessories on page 216.


## Features and Benefits

- Excellent cycling capability and DC performance
- Low arc voltage and low energy let-through ( $1^{2 t}$ )
- 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

