

## Power Fuse

Conquer's power fuses, with voltage ratings up to 1000V, offer optimal protection against overload and short-circuit events in high power AC/DC circuits.



# K6F/K6F-R

10Ø x 38 mm

Over current protection in solar system



### Agency Approvals

| Agency                                 | Ampere Rating |
|--|---------------|
| Certified products for U.S. and Canada | 6A - 30A      |
| TUV                                    | 15A - 30A     |
| CQC                                    | 15A - 30A     |

### Electrical Characteristics

| Ampere Rating | Opening Time |        |         |        |         |        |      |         |
|---------------|--------------|--------|---------|--------|---------|--------|------|---------|
|               | 1 In         |        | 1.13 In |        | 1.35 In |        | 2 In |         |
|               | MIN          | MAX    | MIN     | MAX    | MIN     | MAX    | MIN  | MAX     |
| 6A - 12A      | 4 hr         | -      | -       | 60 min | -       | -      | -    | 120 sec |
| 15A - 30A     | 4 hr         | 60 min | -       | 60 min | -       | 60 min | -    | 240 sec |

### Interrupting Rating: 6A-12A

|          |  |
|----------|--|
| UL248-14 | 100,000 amperes at 600V AC<br>100,000 amperes at 600V DC |
|----------|--|

### Interrupting Rating: 15A-30A

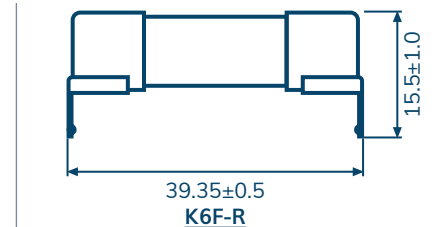
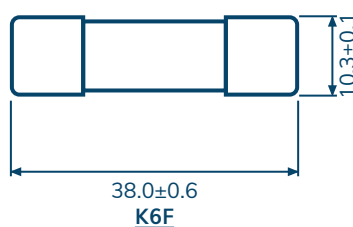
|                             |   |
|-----------------------------|---|
| UL248-14                    | 150,000 amperes at 600V AC<br>50,000 amperes at 600V DC |
| UL248-19                    | 50,000 amperes at 600V DC                               |
| IEC60269-6<br>GB / T13539.6 | 10,000 amperes at 600V DC                               |

| Catalog Number | Ampere Rating (A) | Voltage Rating (V) | Nominal Cold Resistance (Ohms) | Watts Loss 70% In (W) | Watts Loss 100% In (W) | Nominal Melting I <sup>2</sup> t (A <sup>2</sup> sec.) |
|----------------|-------------------|--------------------|--------------------------------|-----------------------|------------------------|--|
| K6F/K6F-R 006  | 6A                | 600V               | 0.0268                         | 1.05                  | 2.4                    | 50.72  |
| K6F/K6F-R 008  | 8A                |                    | 0.0161                         | 1.16                  | 2.64                   | 113.69   |
| K6F/K6F-R 010  | 10A               |                    | 0.0118                         | 1.26                  | 2.90                   | 214.80   |
| K6F/K6F-R 012  | 12A               |                    | 0.0108                         | 1.7                   | 4.3                    | 258.19   |
| K6F/K6F-R 015  | 15A               |                    | 0.0081                         | 2.2                   | 5.4                    | 51.64  |
| K6F/K6F-R 020  | 20A               |                    | 0.0049                         | 2.6                   | 6.3                    | 206.48   |
| K6F/K6F-R 025  | 25A               |                    | 0.0037                         | 3.1                   | 6.9                    | 1067.18  |
| K6F/K6F-R 030  | 30A               |                    | 0.0028                         | 3.5                   | 7.6                    | 1740.00  |

### Product Characteristics

|                       |  |
|-----------------------|--|
| Operating Temperature | -55 °C to 125 °C   |
| Material              | Body: Ceramic /<br>Caps: Nickel Plated<br>Copper Alloy /<br>Terminal: Tin Plated<br>Copper |

### Mechanical Dimensions(mm)



### Packaging

| Packaging Option | Quantity   |
|------------------|--|
| Bulk             | <b>K6F:</b><br>10 pcs / inner box<br>10 inner box / outside box<br><b>K6F-R:</b><br>50 pcs / set<br>20 set / box |

# KSF/KSF-R

10Ø x 38 mm

Over current protection in solar system

2022 Taiwan Excellence Award Recipient



## Safety Approvals

| Agency                                 | Ampere Rating |
|--|---------------|
| Certified products for U.S. and Canada | 15A-30A       |

## Electrical Characteristics

| Ampere Rating | Opening Time |         |         |        |         |        |      |         |
|---------------|--------------|---------|---------|--------|---------|--------|------|---------|
|               | 1 In         | 1.13 In | 1.35 In |        | 1.45 In |        | 2 In |         |
|               | MIN          | MIN     | MIN     | MAX    | MIN     | MAX    | MIN  | MAX     |
| 15A-30A       | 4 hr         | 60 min  | -       | 60 min | -       | 60 min | -    | 240 sec |

## Interrupting Rating

|                            |
|----------------------------|
| 20,000 amperes at 1000V DC |
|----------------------------|

| Catalog Number | Ampere Rating (A) | Voltage Rating (V) | Nominal Cold Resistance (Ohms) | Watts Loss 70% In (W) | Watts Loss 100% In (W) | Clearing I <sup>2</sup> t (A <sup>2</sup> sec.) |
|----------------|-------------------|--------------------|--------------------------------|-----------------------|------------------------|---|
| KSF/KSF-R 015  | 15A               | 1000V              | 0.00854                        | 1.24                  | 3.06                   | 365   |
| KSF/KSF-R 020  | 20A               | 1000V              | 0.00505                        | 1.33                  | 3.22                   | 804.3   |
| KSF/KSF-R 025  | 25A               | 1000V              | 0.00396                        | 1.66                  | 4.28                   | 1202  |
| KSF/KSF-R 030  | 30A               | 1000V              | 0.00302                        | 1.78                  | 4.56                   | 2229  |

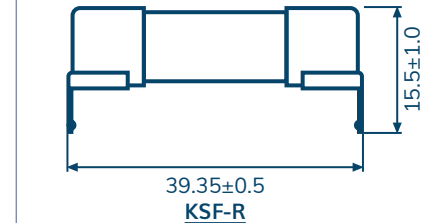
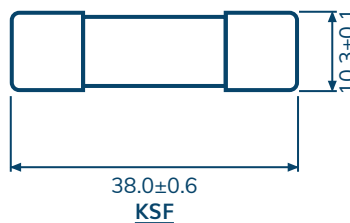
Time constant ≤ 2.0 ms at DC test.

(\*I<sup>2</sup>t measured at 20 kA / 1000 Vdc)

## Product Characteristics

|                       |  |
|-----------------------|--|
| Operating Temperature | -55 °C to 125 °C   |
| Material              | Body: Ceramic /<br>Caps: Nickel Plated Copper Alloy /<br>Terminal: Tin Plated Copper |

## Mechanical Dimensions(mm)



## Packaging

| Packaging Option | Quantity   |
|------------------|--|
| Bulk             | KSF:<br>10 pcs / inner box<br>10 inner box / outside box<br>KSF-R:<br>50 pcs / set<br>20 set / box |

# K5F

35.0Ø x 78.0 mm / 50.0Ø x 83.0 mm

Ideal for use in electric vehicles charging protection boards

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### Agency Approvals

| Agency                                 | Ampere Rating |
|--|---------------|
| Recognized Component for Canada and US | 225A - 700A   |
| CCC                                    | 225A - 700A   |

### Interrupting Rating

|              |   |
|--------------|---|
| 225A - 400A: | 150,000 amperes at 500V AC<br>50,000 amperes at 500V DC |
| 450A - 700A: | 150,000 amperes at 500V AC<br>50,000 amperes at 500V DC |

### Product Characteristics

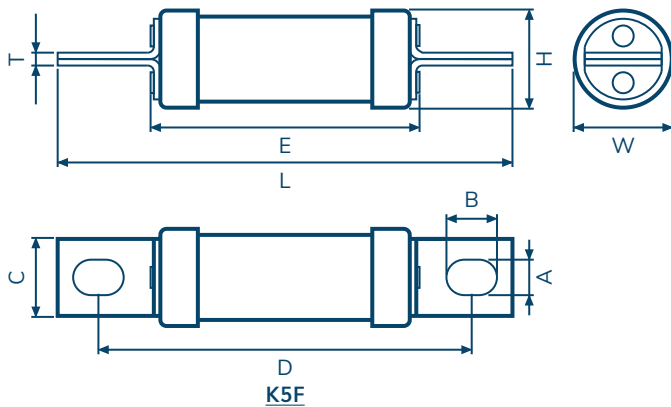
|                       |   |
|-----------------------|---|
| Operating Temperature | -55 °C to 125 °C  |
| Material              | Body: Ceramic<br>Caps: Tin Plated Copper<br>Terminal: Tin Plated Copper |

| Catalog Number | Ampere Rating (A) | Voltage Rating (V) | Watts Loss 100% In (W) | I²t (A² Sec) |                  |
|----------------|-------------------|--------------------|------------------------|--------------|------------------|
|                |                   |                    |                        | Pre-arc      | Clearing at 500V |
| K5F 225        | 225A              | 500V               | 38W                    | 6430         | 16800            |
| K5F 250        | 250A              |                    | 40W                    | 10100        | 27700            |
| K5F 275        | 275A              |                    | 45W                    | 11500        | 31600            |
| K5F 300        | 300A              |                    | 49W                    | 17700        | 45600            |
| K5F 325        | 325A              |                    | 51W                    | 24800        | 63500            |
| K5F 350        | 350A              |                    | 58W                    | 36100        | 80600            |
| K5F 400        | 400A              |                    | 64W                    | 36900        | 91300            |
| K5F 450        | 450A              |                    | 72W                    | 80600        | 152000           |
| K5F 500        | 500A              |                    | 81W                    | 109000       | 193000           |
| K5F 600        | 600A              |                    | 103W                   | 178000       | 304000           |
| K5F 700        | 700A              |                    | 114W                   | 244000       | 419000           |

### Packaging

| Packaging Option | Quantity                   |                           |
|------------------|----------------------------|---------------------------|
| Bulk             | 225A-400A:<br>10 pcs / box | 450A-700A:<br>6 pcs / box |

### Mechanical Dimensions (mm)



| K5F Series  | A        | B        | C        | D        | E        | H        | L         | T       | W        |
|-------------|----------|----------|----------|----------|----------|----------|-----------|---------|----------|
| 225A - 400A | 10.5±1.0 | 19.0±1.0 | 26.0±1.0 | 78.0±4.5 | 47.0±3.0 | 35.0±2.0 | 110.0±3.0 | 6.0±0.2 | 35.0±2.0 |
| 450A - 700A | 10.5±1.0 | 16.0±1.0 | 38.0±1.0 | 83.0±4.5 | 57.0±3.0 | 50.0±2.0 | 112.0±3.0 | 6.0±0.2 | 50.0±2.0 |

# K8F/K8F-A

24.1Ø x 91.6 mm / 35.2Ø x 95.0 mm

Ideal for use in electric vehicles charging protection boards

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### Agency Approvals

| Agency                                 | Ampere Rating |
|--|---------------|
| Recognized Component for Canada and US | 50A - 400A    |

### Interrupting Rating

|              |   |
|--------------|---|
| 50A - 150A:  | 100,000 amperes at 800V AC<br>50,000 amperes at 800V DC |
| 160A - 400A: | 100,000 amperes at 800V AC<br>50,000 amperes at 800V DC |

| Catalog Number  | Ampere Rating (A) | Voltage Rating (V) |
|-----------------|-------------------|--------------------|
| K8F / K8F-A 050 | 50A               | 800V               |
| K8F / K8F-A 075 | 75A               |                    |
| K8F / K8F-A 100 | 100A              |                    |
| K8F / K8F-A 125 | 125A              |                    |
| K8F / K8F-A 150 | 150A              |                    |
| K8F / K8F-A 160 | 160A              |                    |
| K8F / K8F-A 175 | 175A              |                    |
| K8F / K8F-A 200 | 200A              |                    |
| K8F / K8F-A 225 | 225A              |                    |
| K8F / K8F-A 250 | 250A              |                    |
| K8F / K8F-A 300 | 300A              |                    |
| K8F / K8F-A 350 | 350A              |                    |
| K8F / K8F-A 400 | 400A              |                    |

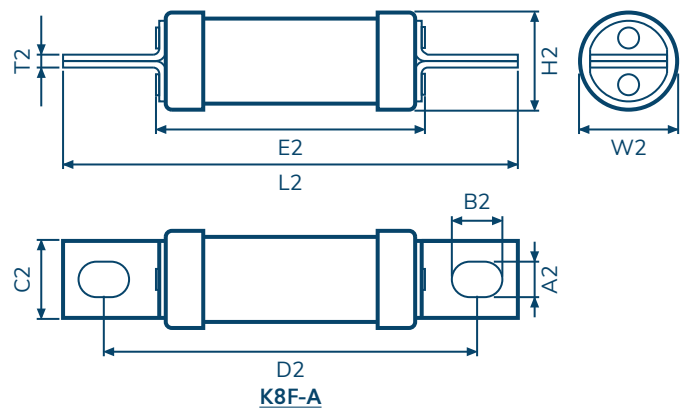
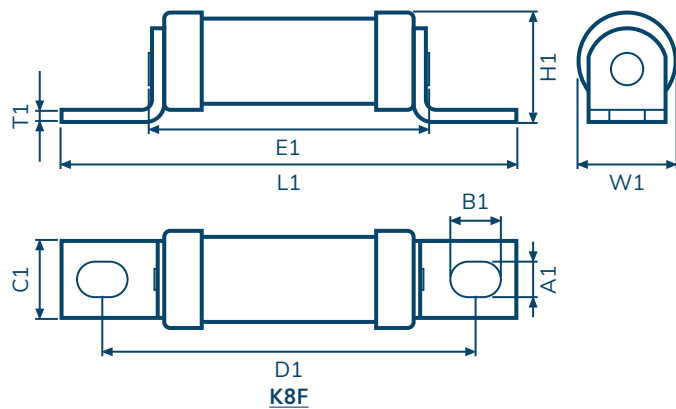
### Product Characteristics

|                       |   |
|-----------------------|---|
| Operating Temperature | -55 °C to 125 °C  |
| Material              | Body: Ceramic<br>Caps: Tin Plated Copper<br>Terminal: Tin Plated Copper |

### Packaging

| Packaging Option | Quantity                  |                            |
|------------------|---------------------------|----------------------------|
| Bulk             | 50A-150A:<br>20 pcs / box | 160A-400A:<br>10 pcs / box |

### Mechanical Dimensions (mm)



| K8F Series   | A1       | B1       | C1       | D1       | E1       | H1       | L1        | T1      | W1       |
|--------------|----------|----------|----------|----------|----------|----------|-----------|---------|----------|
| 50A - 150A   | 8.8±1.0  | 12.4±1.0 | 19.1±1.0 | 91.6±3.6 | 69.0±3.0 | 27.1±2.0 | 111.6±3.0 | 3.0±0.2 | 24.1±2.0 |
| 160A - 400A  | 10.5±1.0 | 15.0±1.0 | 26.0±1.0 | 95.0±4.5 | 69.2±3.0 | 38.2±2.0 | 117.6±3.0 | 3.0±0.2 | 35.2±2.0 |
| K8F-A Series | A2       | B2       | C2       | D2       | E2       | H2       | L2        | T2      | W2       |
| 50A - 150A   | 8.8±1.0  | 12.4±1.0 | 19.1±1.0 | 91.6±3.6 | 66.0±3.0 | 24.1±2.0 | 111.6±3.0 | 3.4±0.2 | 24.1±2.0 |
| 160A - 400A  | 10.5±1.0 | 15.0±1.0 | 26.0±1.0 | 95.0±4.5 | 69.2±3.0 | 35.2±2.0 | 117.6±3.0 | 6.0±0.2 | 35.2±2.0 |

# EVS

10Ø x 38 mm

Compliant with the ISO 8820 standard

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## Interrupting Rating

|                           |
|---------------------------|
| 10,000 amperes at 275V AC |
| 10,000 amperes at 450V DC |
| 20,000 amperes at 500V DC |

## Electrical Characteristics

| Ampere Rating | 1.1 In | 1.35 In |          | 1.5 In |          |
|---------------|--------|---------|----------|--------|----------|
|               | MIN    | MIN     | MAX      | MIN    | MAX      |
| 10A - 50A     | 4 hr   | 150 sec | 3600 sec | 10 sec | 1000 sec |

## Product Characteristics

|                              |  |
|------------------------------|--|
| <b>Operating Temperature</b> | -55 °C to 125 °C   |
| <b>Material</b>              | Body: Ceramic /<br>Caps: Nickel Plated<br>Copper Alloy /<br>Terminal: Tin Plated<br>Copper |

| Ampere Rating | Opening Time |         |        |        |       |       |
|---------------|--------------|---------|--------|--------|-------|-------|
|               | 2 In         |         | 3 In   |        | 5 In  |       |
|               | MIN          | MAX     | MIN    | MAX    | MIN   | MAX   |
| 10A - 50A     | 500 ms       | 100 sec | 100 ms | 15 sec | 50 ms | 1 sec |

## Packaging

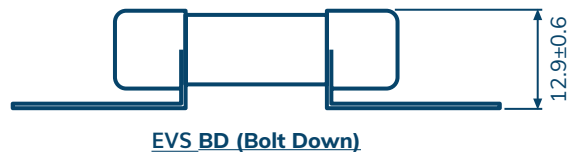
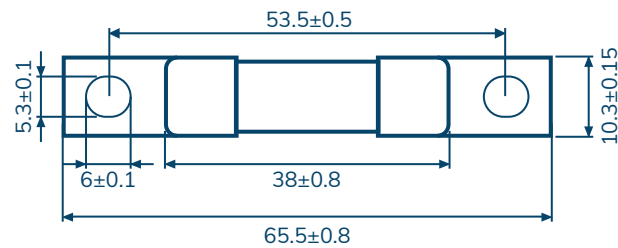
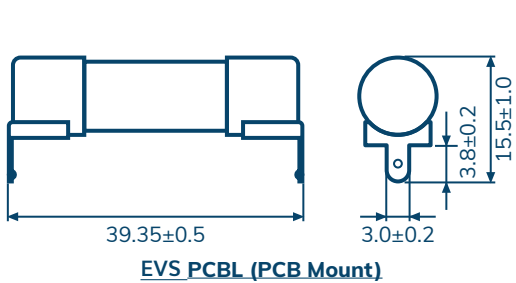
| Packaging Option | Quantity   |
|------------------|--|
| Bulk             | <b>PCBL (PCB Mount):</b><br>50 pcs / set<br>20 set / box<br><b>BD (Bolt Down):</b><br>40 pcs / set<br>20 set / box |

| Catalog Number | Ampere Rating (A) | Voltage Rating (V) | Max Voltage Drop (mv) | Nominal Cold Resistance (Ohms) | Nominal Melting I <sup>2</sup> t (A <sup>2</sup> sec.) |
|----------------|-------------------|--------------------|-----------------------|--------------------------------|--|
| EVS 010        | 10A               | 500V               | 200 mv                | 0.01153                        | 323  |
| EVS 015        | 15A               | 500V               | 200 mv                | 0.00665                        | 1153   |
| EVS 020        | 20A               | 500V               | 200 mv                | 0.00502                        | 623  |
| EVS 030        | 30A               | 500V               | 200 mv                | 0.00243                        | 3024   |
| EVS 040        | 40A               | 500V               | 200 mv                | 0.00171                        | 7253   |
| EVS 050        | 50A               | 500V               | 200 mv                | 0.00123                        | 9203   |

\* Time constant ( 2.0 ± 0.5 ) ms at DC test

( \*I<sup>2</sup>t measured at 20 kA / 500 Vdc )

## Mechanical Dimensions(mm)



# AUC

10.4Ø x 38.5 mm

Designed for use in large-scale air conditioning units



## Agency Approvals

| Agency                                 | Ampere Rating |
|--|---------------|
| Recognized Component for Canada and US | 25A - 70A     |

## Interrupting Rating

|                          |
|--------------------------|
| 2,000 amperes at 500V AC |
| 2,000 amperes at 250V AC |
| 1,000 amperes at 125V DC |

## Product Characteristics

|                              |  |
|------------------------------|--|
| <b>Operating Temperature</b> | -55 °C to 125 °C   |
| <b>Material</b>              | Body: Ceramic /<br>Caps: Nickel Plated<br>Copper Alloy /<br>Terminal: Tin Plated<br>Copper |

## Packaging

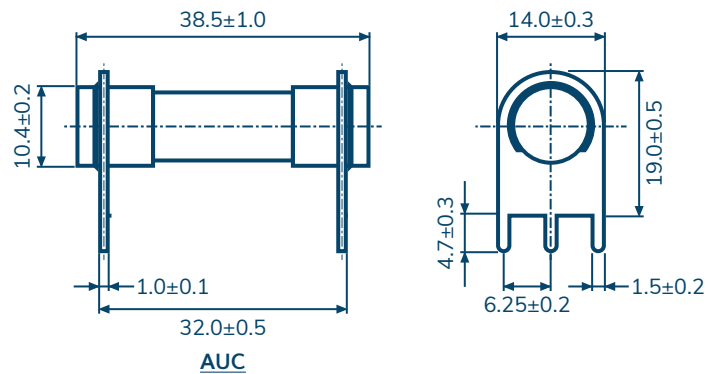
| Packaging Option | Quantity     |
|------------------|--------------|
| Bulk             | 80 pcs / box |

## Electrical Characteristics

| Ampere Rating | Opening Time |         |
|---------------|--------------|---------|
|               | 1 In         | 2 In    |
|               | MIN          | MAX     |
| 25A - 70A     | 4 hr         | 120 sec |

| Catalog Number | Ampere Rating (A) | Voltage Rating (V) | Nominal Cold Resistance (Ohms) | Nominal Melting I <sup>2</sup> t (A <sup>2</sup> sec.) |
|----------------|-------------------|--------------------|--------------------------------|--|
| AUC 030        | 30A               | 250/500V           | 0.00283                        | 675.00   |
| AUC 040        | 40A               |                    | 0.0019                         | 2616.00  |
| AUC 050        | 50A               |                    | 0.0014                         | 3975.00  |
| AUC 063        | 63A               |                    | 0.0011                         | 6271.00  |
| AUC 070        | 70A               |                    | 0.0010                         | 11760.0  |

## Mechanical Dimensions(mm)



# ALC

14.6Ø x 38.5 mm

Designed for over-current protection in high voltage applications



### Agency Approvals

| Agency                                 | Ampere Rating |
|--|---------------|
| Recognized Component for Canada and US | 25A - 90A     |

### Interrupting Rating

|            |  |
|------------|--|
| 25A - 63A: | 500 amperes at 125V DC<br>1,500 amperes at 600V AC<br>2,000 amperes at 250V AC |
| 90A:       | 1,500 amperes at 500V AC   |

### Product Characteristics

|                       |  |
|-----------------------|--|
| Operating Temperature | -55 °C to 125 °C   |
| Material              | Body: Ceramic /<br>Caps: Nickel Plated<br>Copper Alloy /<br>Terminal: Tin Plated<br>Copper |

### Packaging

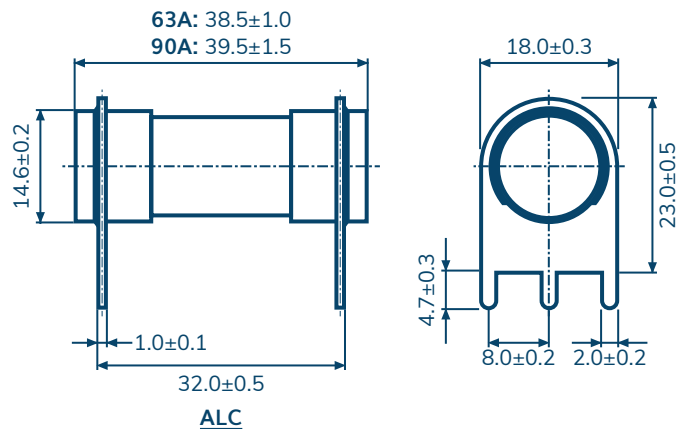
| Packaging Option | Quantity     |
|------------------|--------------|
| Bulk             | 60 pcs / box |

### Electrical Characteristics

| Ampere Rating | Opening Time |         |
|---------------|--------------|---------|
|               | 1 In         | 2 In    |
|               | MIN          | MAX     |
| 25A - 63A     | 4 hr         | 120 sec |
| 90A           | 4 hr         | 360 sec |

| Catalog Number | Ampere Rating (A) | Voltage Rating (V) | Nominal Cold Resistance (Ohms) | Nominal Melting I <sup>2</sup> t (A <sup>2</sup> sec.) |
|----------------|-------------------|--------------------|--------------------------------|--|
| ALC 063        | 63A               | 250V / 600V        | 0.0013                         | 9892.95  |
| ALC 090        | 90A               | 500V               | 0.00085                        | 9234.00  |

### Mechanical Dimensions(mm)





# AMC

14.6Ø x 22.3 mm

Suitable for the telecommunications industry



### Agency Approvals

| Agency                                 | Ampere Rating |
|--|---------------|
| Recognized Component for Canada and US | 30A - 125A    |

### Interrupting Rating

|                            |
|----------------------------|
| 100,000 amperes at 170V DC |
|----------------------------|

### Product Characteristics

|                              |  |
|------------------------------|--|
| <b>Operating Temperature</b> | -55 °C to 125 °C   |
| <b>Material</b>              | Cap: Nickel Plating/<br>Tin Plating<br>(only AMC-LSE Series)<br>Body: Ceramic<br>Terminal: Copper<br>(Tin Plating) |

### Packaging

| Packaging Option | Quantity     |
|------------------|--------------|
| Bulk             | 10 pcs / box |

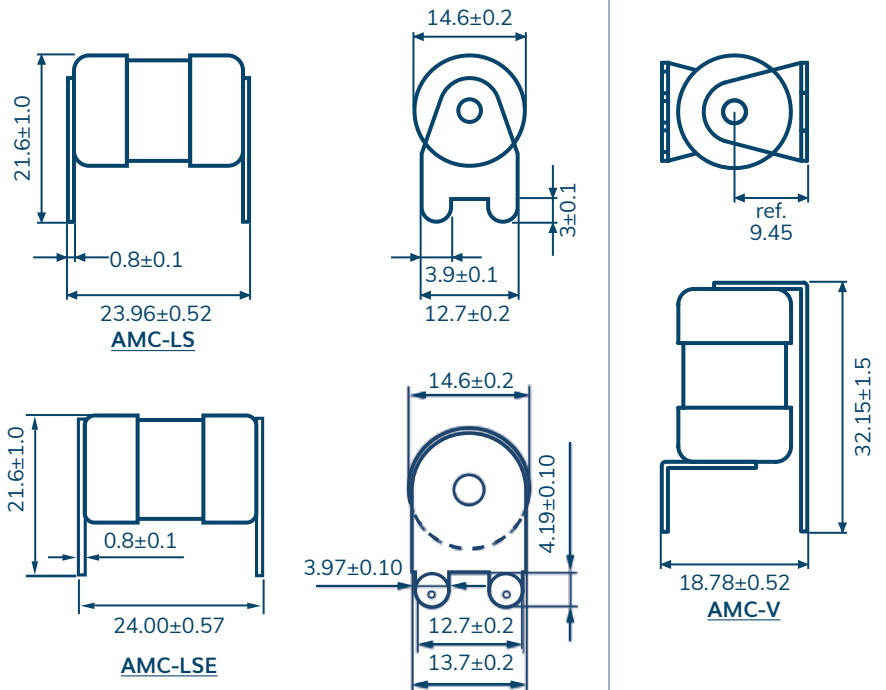
### Electrical Characteristics

| Ampere Rating | Opening Time |         |        |
|---------------|--------------|---------|--------|
|               | 1 In         | 1.35 In | 2 In   |
|               | MIN          | MAX     | MAX    |
| 31A - 60A     | 4 hr         | 1 hr    | 6 min  |
| 61A - 100A    | 4 hr         | 2 hr    | 8 min  |
| 101A - 125A   | 4 hr         | --      | 10 min |

| Catalog Number | Ampere Rating (A) | Voltage Rating (V) | Nominal Cold Resistance (Ohms) | Nominal Melting I <sup>2</sup> t (A <sup>2</sup> sec.) | Version |
|----------------|-------------------|--------------------|--------------------------------|--|---------|
| AMC 040        | 40A               | 170V               | 0.00156                        | 1974   | -LS/-V  |
| AMC 050        | 50A               |                    | 0.00123                        | 4139   |         |
| AMC 060        | 60A               |                    | 0.00090                        | 6454   |         |
| AMC 080        | 80A               |                    | 0.00074                        | 8236   |         |
| AMC 100        | 100A              |                    | 0.00057                        | 10250  |         |
| AMC 125        | 125A              |                    | 0.00041                        | 14633  | -LSE    |

\* I<sup>2</sup>t test at 170V short circuit

### Mechanical Dimensions(mm)



# BMC

17.4Ø x 42 mm

Ideal for use in electric vehicles charging protection boards



### Agency Approvals

| Agency                                 | Ampere Rating |
|--|---------------|
| Recognized Component for Canada and US | 25A - 180A    |
| CCC                                    | 50A - 180A    |

### Interrupting Rating

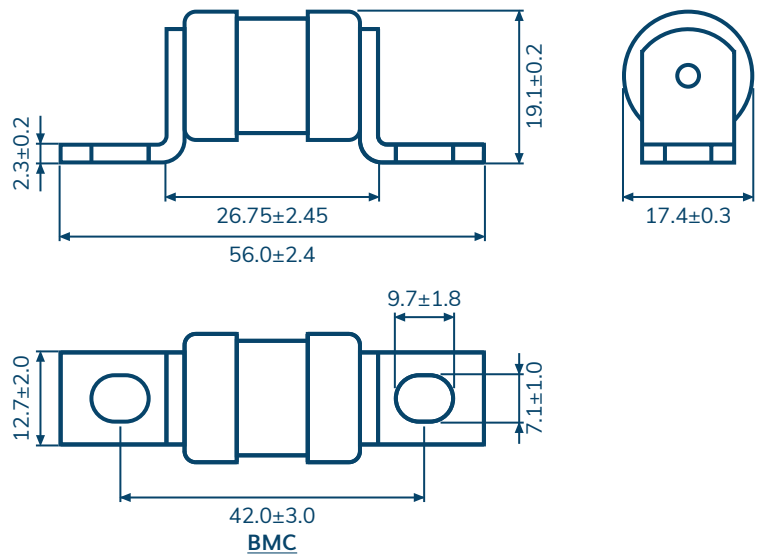
|                            |
|----------------------------|
| 160,000 amperes at 240V AC |
| 50,000 amperes at 150V DC  |

| Catalog Number | Ampere Rating (A) | Voltage Rating (V) | Nominal Cold Resistance (Ohms) | Watts Loss 100% In (W) | Clearing at 240V I <sup>2</sup> t (A <sup>2</sup> sec.) |
|----------------|-------------------|--------------------|--------------------------------|------------------------|---|
| BMC 050        | 50A               | 240V               | 0.00183                        | 8.800                  | 2463.00   |
| BMC 060        | 60A               |                    | 0.00156                        | 11.00                  | 3574.30   |
| BMC 070        | 70A               |                    | 0.00117                        | 12.50                  | 4047.00   |
| BMC 080        | 80A               |                    | 0.00098                        | 13.70                  | 5447.00   |
| BMC 100        | 100A              |                    | 0.00072                        | 16.20                  | 8352.00   |
| BMC 125        | 125A              |                    | 0.00060                        | 22.00                  | 10077.0   |
| BMC 150        | 150A              |                    | 0.00049                        | 25.00                  | 15100.0   |
| BMC 180        | 180A              |                    | 0.00038                        | 25.00                  | 17268.0   |

### Product Characteristics

|                       |   |
|-----------------------|---|
| Operating Temperature | -55 °C to 125 °C  |
| Material              | Body: Ceramic /<br>Caps: Tin Plated Copper Alloy /<br>Terminal: Tin Plated Copper |

### Mechanical Dimensions(mm)



### Packaging

| Packaging Option | Quantity     |
|------------------|--------------|
| Bulk             | 10 pcs / box |