

Type 0AKN

Electric Vehicle Power Fuses

0AKN Series

RoHS Compliant

Description

500VDC rated ceramic tube fuse

Features



- Design to EV fuse standard UL248-20
- Reliability performance design refer to ISO8820-8&GB/T31465.6
- Excellent DC performance
- Full compliance with EU Directive 2011/65/EU and amending directive 2015/863

Applications

EV/HEV/ESS Applications



Physical Specifications

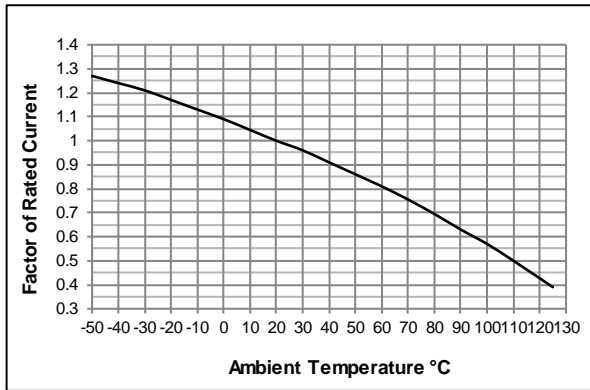
| | |
|-----------|--|
| Materials | Body : Ceramic |
| | Terminals : Tin Plated Copper |
| Marking | On Fuse : |
| | "bel", "0AKN" |
| | "Current Rating", "Voltage Rating" |
| | On Label : |
| | "bel", "0AKNX", "Current Rating", "Voltage Rating", "Interrupting Rating", and "  ", "  "(China RoHS compliant). |

Ratings

| Ampere Rating / Voltage Rating | Ampere Range / Volt @ I.R. ability* |
|---|-------------------------------------|
| 100A-250A / 500V DC | 100A-250A / 500V @ 50kA DC |
| *I.R.= Interrupting Rating = Short Circuit Rating(Amps) | |

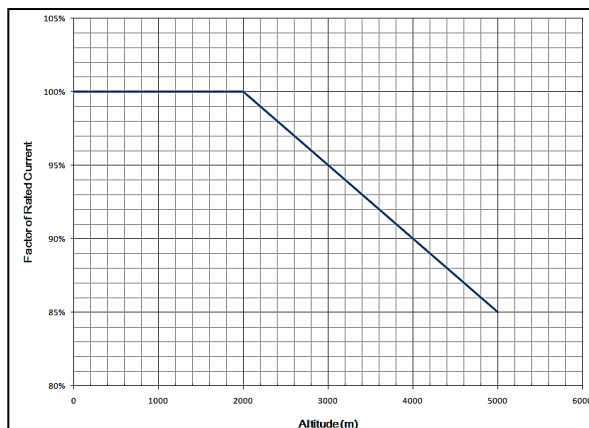
Temperature Derating Curve

Operating Temperature: -40°C to +125°C, with proper derating factor applied

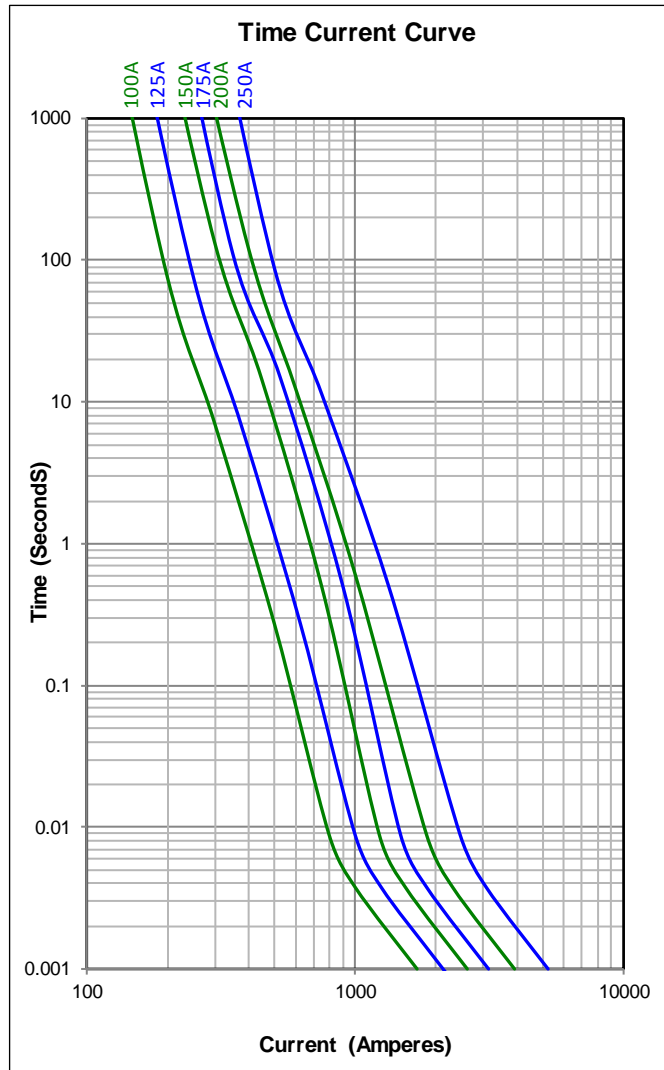


Re-rating with High altitude

The high altitude load calculation formula is:
 $I = I_n * (1 - (h-2000)/100 * (0.5/100))$,
 where h is an elevation, not more than 5000



Average Time Current Curve



Electrical Specifications

| Part Number | Rated Current | Voltage and Interrupting Ratings | I2t (A2sec) | | Power Loss (W) |
|--------------|---------------|--|-------------|----------------|----------------|
| | | | Pre-arcing | Total @ 500Vdc | |
| 0AKNxK100-xx | 100A | See Table of Ratings on Page 1 for Voltage and associated Interrupting Ratings | 1770 | 7020 | 14.9 |
| 0AKNxK125-xx | 125A | | 2850 | 11500 | 19.3 |
| 0AKNxK150-xx | 150A | | 4150 | 15770 | 23.1 |
| 0AKNxK175-xx | 175A | | 5970 | 22850 | 27.5 |
| 0AKNxK200-xx | 200A | | 9350 | 36500 | 30.8 |
| 0AKNxK250-xx | 250A | | 16600 | 67800 | 35.2 |

Consult manufacturer for other ratings



Specifications subject to change without notice

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Jersey City, NJ 07302 USA

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Bel.US.CS@belf.com
belfuse.com/circuit-protection

Type 0AKN

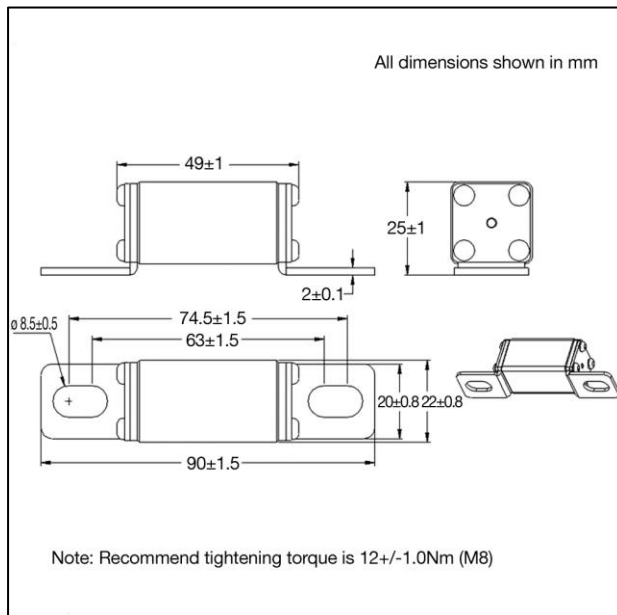
Fuse FGNO Explanation

0AKN X [XXXX] -XX

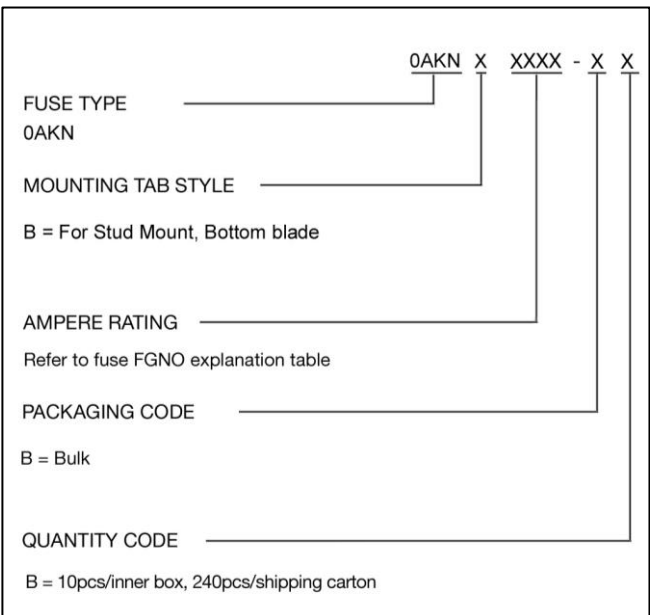
0AKNB=0AKNB; [XXXX]=Ampere Rating; XX=See Ordering Information as below

| Amps | Bel FGNO[XXXX] |
|------|----------------|
| 100A | K100 |
| 125A | K125 |
| 150A | K150 |
| 175A | K175 |
| 200A | K200 |
| 250A | K250 |

Mechanical Dimensions



Ordering Information



Packaging

| Packaging Option | Quantity | Packaging Code |
|------------------|---|----------------|
| Bulk | 10pcs/inner box, 240pcs/shipping carton | BB |

Mouser Electronics

Authorized Distributor

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[Bel:](#)

[0AKNBK100-BB](#) [0AKNBK125-BB](#) [0AKNBK150-BB](#) [0AKNBK175-BB](#) [0AKNBK200-BB](#) [0AKNBK250-BB](#)