

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 :
	For 0AKNB: "bel", "0AKNB", "Current Rating", "Interrupting Rating", "Voltage Rating", "Appropriate Safety Logos", "aR"
	For 0AKNZ: : "bel", "0AKNZ", "Current Rating", "Interrupting Rating", "Voltage Rating"
	On Label :
	"bel", "0AKNX", "Current Rating", "Voltage Rating", "Interrupting Rating", "Appropriate Safety Logos" and "  ", "  "(China RoHS compliant).

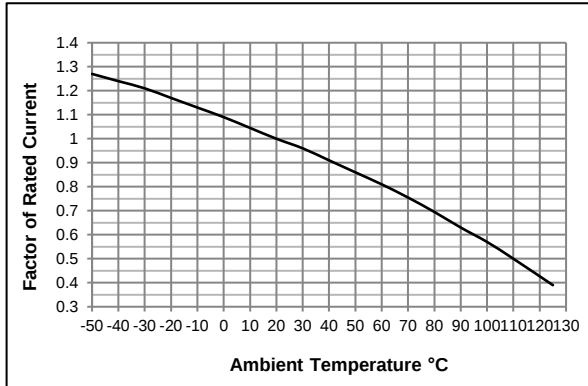


Safety Agency Approvals

Safety Agency	Part Number	Ampere Rating / Voltage Rating	Ampere Range / Volt @ I.R. ability*
 E491441	0AKNBxxxx-xx	100A-250A / 500V DC	100A-250A / 500V @ 50kA DC
	0AKNBxxxx-xx	100A-200A / 420V AC	100A-200A / 420V @ 20kA AC
	0AKNZxxxx-xx	100A-250A / 500V DC 100A-200A / 420V AC	100A-250A / 500V @ 50kA DC 100A-200A / 420V @ 20kA AC
*I.R.= Interrupting Rating = Short Circuit Rating(Amps)			

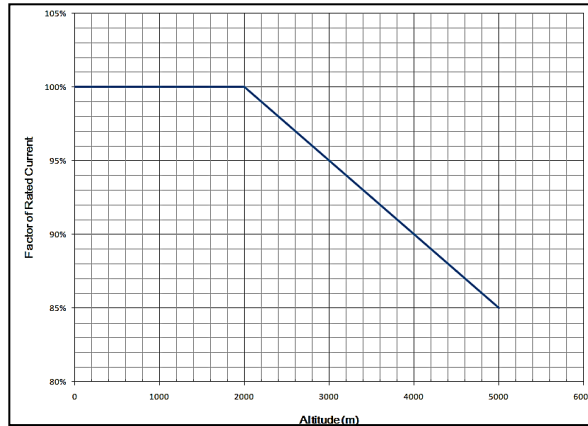
Temperature Derating Curve

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

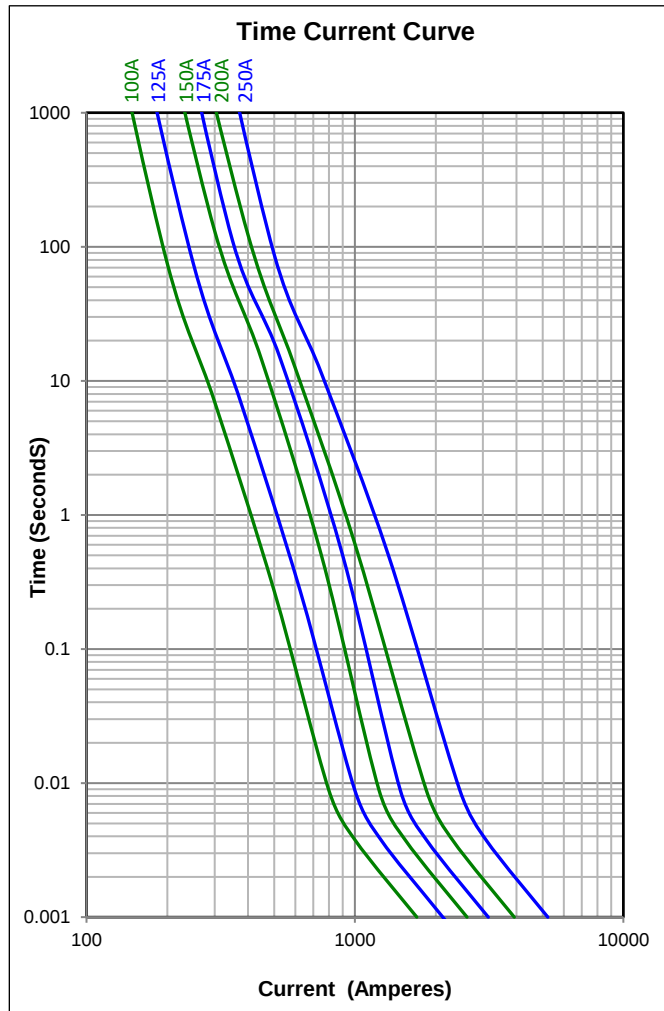


Re-rating with High altitude

The high altitude load calculation formula is:
 $I = I_n \cdot (1 - (h-2000)/100 \cdot (0.5/100))$,
 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)	Agency Approvals
			Pre-arcing	Total @ 500Vdc		
0AKNBK100-xx	100A	See Table of Ratings on Page 1 for Voltage and associated Interrupting Ratings	1770	7020	14.9	Y
0AKNZK100-xx						
0AKNBK125-xx	125A		2850	11500	19.3	Y
0AKNZK125-xx						
0AKNBK150-xx	150A		4150	15770	23.1	Y
0AKNZK150-xx						
0AKNBK175-xx	175A		5970	22850	27.5	Y
0AKNZK175-xx						
0AKNBK200-xx	200A		9350	36500	30.8	Y
0AKNZK200-xx						
0AKNBK250-xx	250A		16600	67800	35.2	Y
0AKNZK250-xx						

Consult manufacturer for other ratings

Type 0AKN

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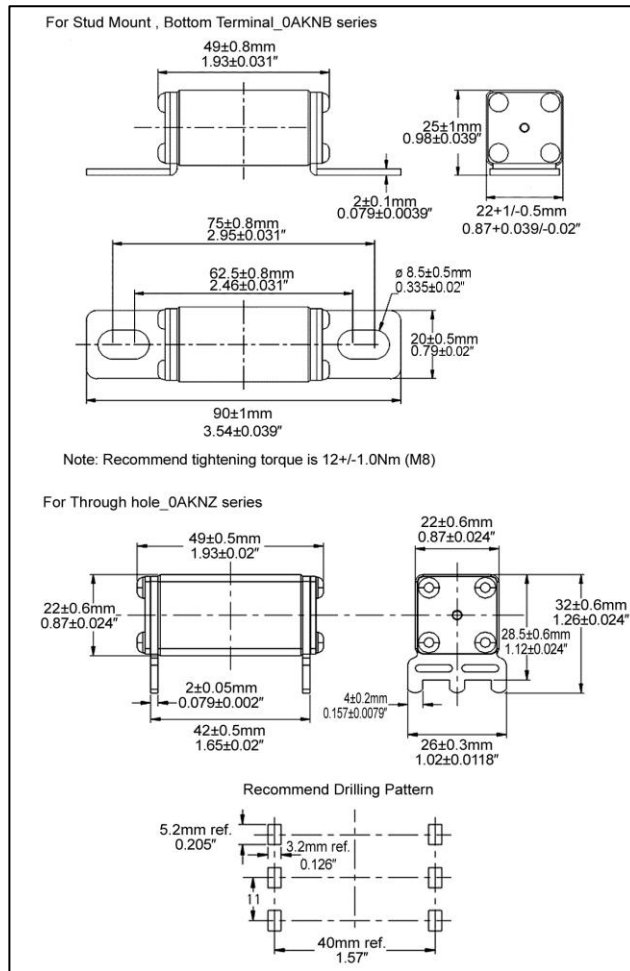
Fuse FGNO Explanation

0AKN X [XXXX] -XX

0AKNB/0AKNZ=0AKNB/0AKNZ; [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

0AKN X XXXX - XX

FUSE TYPE _____
0AKN

MOUNTING TAB STYLE _____
B = For Stud Mount, Bottom Terminal
Z = Through hole (3-pin PCB mount)

AMPERE RATING _____
Refer to fuse FGNO explanation table

PACKING/QUANTITY CODE _____
BB (for 0AKNB, Stud Mount, Bottom Terminal)
B = Bulk
B = 10pcs/inner box, 240pcs/shipping carton

BB (for 0AKNZ, Wave solder, 3-pin PCB mount)
B = Bulk
B = 9pcs/inner box, 162pcs/shipping carton

Packaging

Packaging Option	Quantity	Packaging Code
Bulk(for 0AKNB, Stud Mount, Bottom Terminal)	10pcs/inner box, 240pcs/shipping carton	BB
Bulk(for 0AKNZ, Wave solder, 3-pin PCB mount)	9pcs/inner box, 162pcs/shipping carton	BB

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Bel:](#)

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