

Type 0AKL

Electric Vehicle Auxiliary Fuses

0AKL Series

RoHS Compliant

Description

General purpose fuse for EV/HEV

Features

- Excellent DC performance
- Design refer to JASO D622:2006(for 10A-30A)
- Design to EV fuse standard UL248-20(for 40A-50A)
Reliability performance design refer to ISO8820-8&GB/T31465.6(for 40A-50A)
- Full compliance with EU Directive 2011/65/EU and amending directive 2015/863

Applications

EV or HEV application

Electrical Characteristics

% of Ampere Rating (A)	10A-30A		40A-50A	
	Operating Time (Unit: s)		Operating Time (Unit: s)	
	Min.	Max.	Min.	Max.
200%	1	300	0.5	100
300%	0.2	30	0.1	15
500%	0.1	10	0.05	1



Physical Specifications

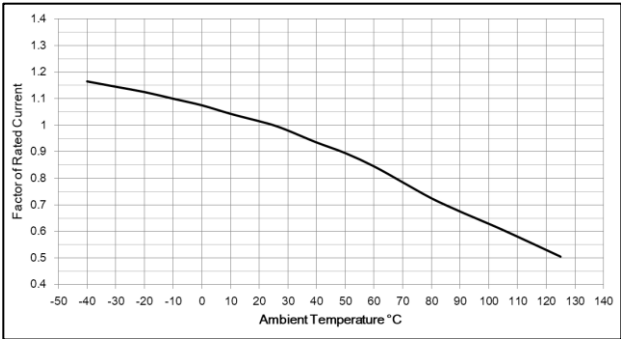
Materials	Body : Ceramic
	Terminals : 10A-30A: Stud Mount, Center Terminal (Tin Plated Brass); Stud Mount, Bottom Terminal (Tin Plated Copper); Wave solder, 1-pin PCB mount (Silver Plated Brass); Wave solder, 2-pin PCB mount (Tin Plated Copper). 40A-50A: Wave solder, 3-pin PCB mount (Tin Plated Copper); Stud Mount, Bottom Terminal (Tin Plated Copper)
Marking	On Fuse :
	"bel", "0AKL",
	"Current Rating", "Voltage Rating"
	On Label :
	"bel", "0AKLX", "Current Rating", "Voltage Rating", "Interrupting Rating", "Appropriate Safety Logos" and "RoHS", "CE" (China RoHS compliant).

Ratings

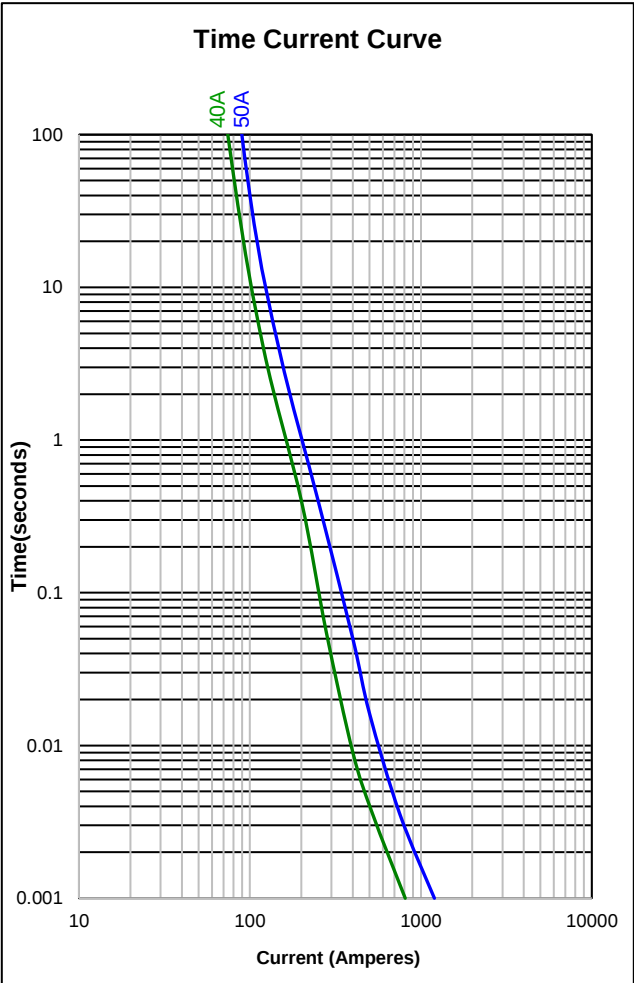
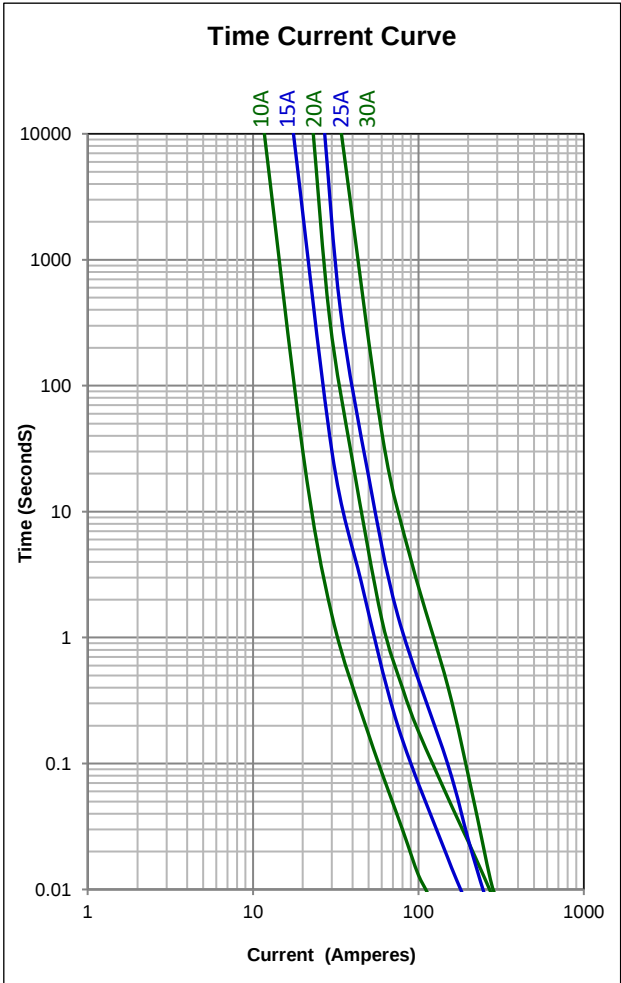
Ampere Rating / Voltage Rating	Ampere Range / Volt @ I.R. ability*
10A-50A / 1000V DC	10A-50A / 1000V @ 50kA DC
*I.R.= Interrupting Rating = Short Circuit Rating(Amps)	

Temperature Re-Rating Curve

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



Average Time Current Curve



Electrical Specifications

Part Number	Ampere Rating	Voltage and Interrupting Ratings	Typical cold resistance (mOhms)	Typical voltage drop (mV)		Typical pre-arcing I^2t^{**} (A ² sec)
				At 0.5In	At 1.0In	
0AKLx9100-xx	10A	See Table of Ratings on Page 1 for Voltage and associated Interrupting Ratings	12.5	60	130	120
0AKLx9150-xx	15A		7.2	60	140	405
0AKLx9200-xx	20A		5.2	80	154	1450
0AKLx9250-xx	25A		4.0	63	145	560
0AKLx9300-xx	30A		3.1	56	150	650

Consult manufacturer for other ratings

*Temperature Rise: <=50K with 70% of rated current

** Typical pre-arcing I^2t measured at 10In

Part Number	Ampere Rating	Voltage and Interrupting Ratings	Power Loss@0.5In (W)	Typical pre-arcing I^2t^{**} (A ² sec)
0AKLx9400-xx	40A	See Table of Ratings on Page 1 for Voltage and associated Interrupting Ratings	1.3	1440
0AKLx9500-xx	50A		1.45	4000

** Typical pre-arcing I^2t measured at 10In

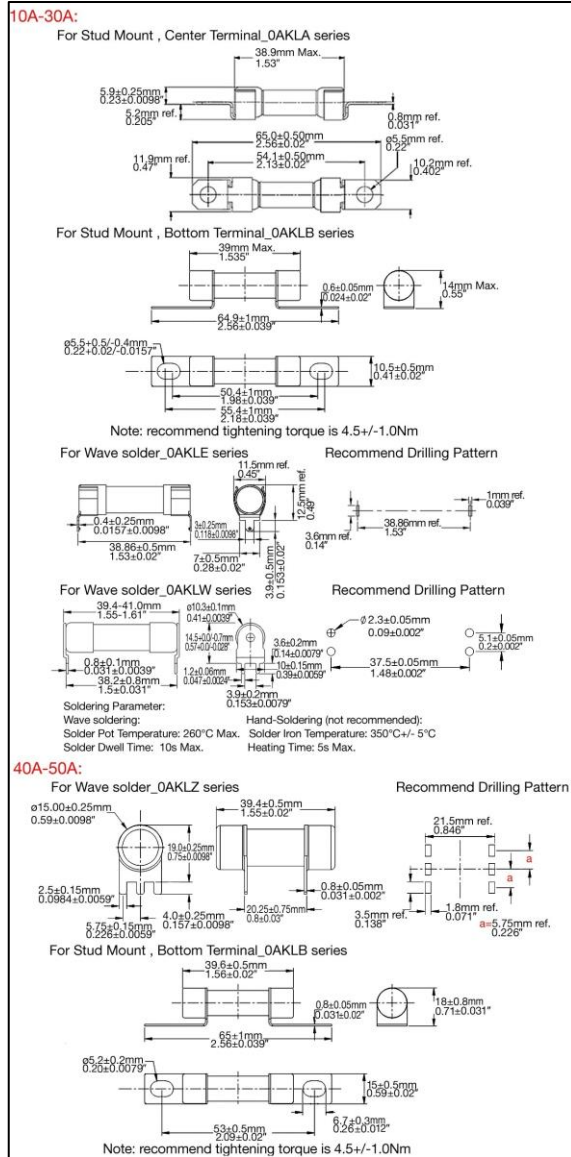
Fuse FGNO Explanation

0AKL X [XXXX] -XX

0AKLA/B/E/W/=0AKLA/B/E/W; [XXXX]=Ampere Rating; XX=See Ordering Information as below

Amps	Bel FGNO[XXXX]	Amps	Bel FGNO[XXXX]
10	9100	25	9250
15	9150	30	9300
20	9200	40	9400
		50	9500

Mechanical Dimensions



Ordering Information

OAKL X XXXX - X X

FUSE TYPE

OAKL

MOUNTING TAB STYLE

A = For Stud Mount, Center Terminal

B = For Stud Mount, Bottom Terminal

E = For Wave solder(1-pin PCB mount)

W = For 10A-30A Wave solder(2-pin PCB mount)

Z = For 40A-50A Wave solder(3-pin PCB mount)

AMPERE RATING

Refer to fuse FGNO explanation table

PACKING/QUANTITY CODE

BE (for OAKLE, 10A-30A Wave solder, 1-pin PCB mount)

B = Bulk

E = 20pcs/inner box, 700pcs/carton box

BF (for OAKLA, 10A-30A Stud mount, center terminal)

B = Bulk

F = 20pcs/inner box, 1200pcs/carton box

PD (for OAKLB, 10A-30A Stud Mount, Bottom Terminal)

P = Plastic tray pack

D = 40pcs/tray, 400pcs/carton box

BE (for OAKLW, 10A-30A Wave solder, 2-pin PCB mount)

B = Bulk

E = 20pcs/inner box, 640pcs/carton box

BB (for OAKLZ, 40A-50A Wave solder, 3-pin PCB mount)

B = Bulk

B = 10pcs/inner box, 240pcs/carton box

BC (for OAKLB, 40A-50A Stud Mount, Bottom Terminal)

B = Bulk

C = 12pcs/inner box, 324pcs/carton box

Packaging

Packaging Option	Quantity	Packaging Code
Plastic tray (For OAKLB 10A-30A)	40 pcs/plastic tray, 400pcs/ carton box	PD
Bulk (For OAKLE 10A-30A)	20pcs / inner box, 700pcs (35 inner boxes) / carton box	BE
Bulk (For OAKLA 10A-30A)	20pcs / inner box, 1200pcs (60 inner boxes) / carton box	BF
Bulk (For OAKLW 10A-30A)	20pcs/inner box, 640pcs (32 inner boxes) /carton box	BE
Bulk (For OAKLZ 40A-50A)	10pcs/inner box, 240pcs (24 inner boxes) /carton box	BB
Bulk (For OAKLB 40A-50A)	12pcs / inner box, 324pcs (27 inner boxes) / carton box	BC