

Type 0ACA



Power Battery Packs Protection Series

HF  0ACA Series

RoHS Compliant

Features

- Surface mount design to save space, 2410 SMD
- Ceramic square body with Silver plated end cap
- Compatible with 260 °C, IR Pb-free solder process
- Wide operating temperature range, -55°C to 125°C
- Tape & Reel for auto-insert SMD process
- Designed to UL248-1
- Fully compliance with EU Directive 2011/65/EU and amending directive 2015/863
- Fully compatible with lead-free solder and high temperature profile associated with lead-free assembly
- pass internal reliability performance and applicable for low duty application (bicycle etc.)



HALOGEN FREE = 
LEAD FREE = 

Applications

- E-Bike
- E-Motor
- e Robot sweeper
- Power Tools




Physical Specifications

Materials	Body : Ceramic
	Cap : Silver plated copper
Marking	On Fuse :
	"Current Rating"
	On Label :
	"bel", "0ACA", "Current Rating", "Voltage Rating", "Interrupting Rating", and "  ", "  "(China RoHS compliant).

Electrical Characteristics

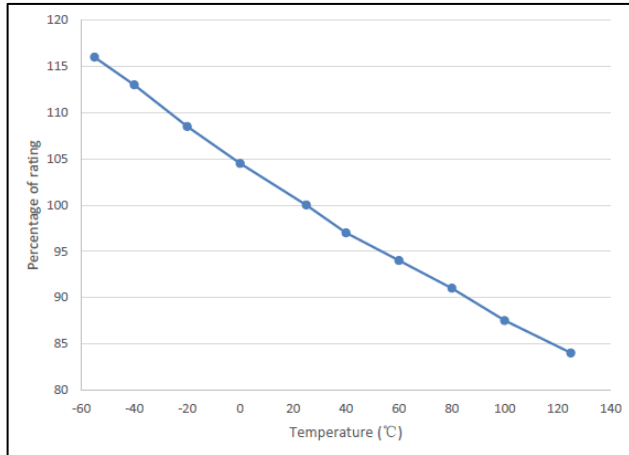
% of Ampere Rating (A)	Operating Time	
	Min	Max
100%	4hours	-
200%	-	60sec

Safety Agency Approvals

Safety Agency	Ampere Rating / Voltage Rating	Ampere Range / Volt @ I.R. ability*
	20-30A / 72V DC 40A / 63V DC	20-30A / 72V @ 500A DC 40A / 63V @ 500A DC
*I.R.=DC Interrupting Rating		

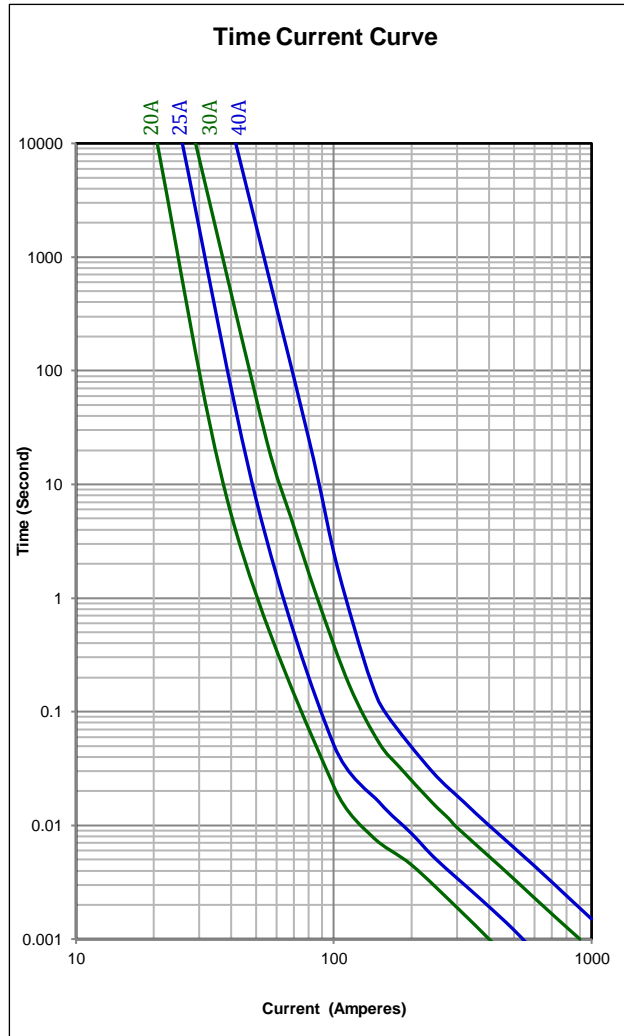
Temperature Re-Rating Curve

Normal Operating Temperature: $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$
 Operating Temperature: -55°C to 125°C with proper correction factor applied.
 Chart of correction factor



Storage Temperature: -55°C to 125°C

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^2Sec)**
0ACA-9200-XX	20A	See Table of Ratings on Page 1 for Voltage and associated Interrupting Ratings	2.3	60	210
0ACA-9250-XX	25A		1.7	55	400
0ACA-9300-XX	30A		1.2	50	900
0ACA-9400-XX	40A		0.9	50	1600

Consult manufacturer for other ratings
 **Typical Pre-arcing I^2t are measured at $10I_n$ Current.



Specifications subject to change without notice

Bel Fuse Inc.
 206 Van Vorst Street
 Jersey City, NJ 07302 USA

+1 201.432.0463
 Bel.US.CS@belf.com
belfuse.com/circuit-protection

Soldering Characteristics

Wave Immersion

- Reservoir Temperature: 260° C
- Time in Reservoir : 10 Seconds Maximum

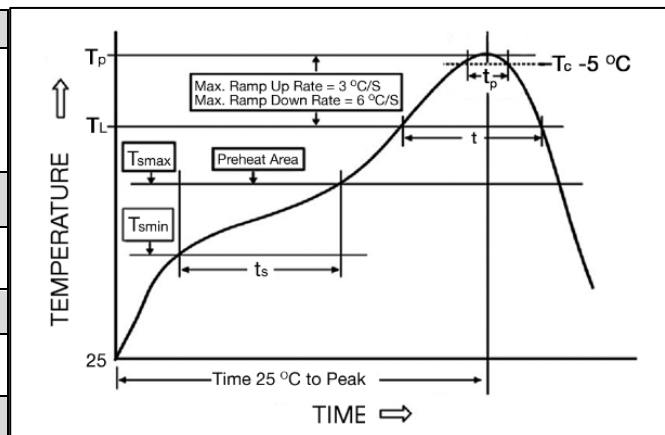
Infrared Reflow

- Temperature: 260° C
- Time: 30 Seconds Maximum

Hand Soldering (not recommended)

- Maximum tip temperature: 350°C
- Maximum soldering time: 5 seconds max

Profile Feature	
Preheat & Soak	
Temperature min (T _{sm})	150°C
Temperature max (T _{sm})	200°C
Time (T _{sm} to T _{sm}) (t _s)	60-120 seconds
Average ramp-up rate (T _{sm} to T _p)	3°C/second max.
Liquidous temperature (T _L)	217°C
Time at liquidous (t _L)	60-150 seconds
Peak package body temperature (T _p)	260°C
Time (t _p) within 5°C of the specified classification temperature (T _c)	30 seconds
Average ramp-down rate (T _p to T _{sm})	6°C/second max.
Time 25°C to peak temperature	8 minutes max.



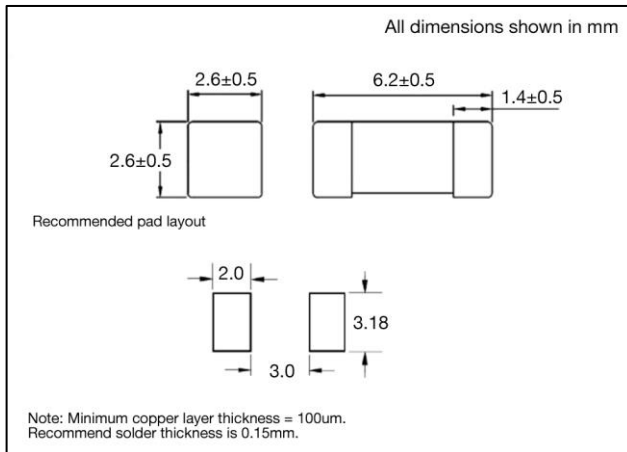
Fuse FGNO Explanation

0ACA - [XXXX] -XX

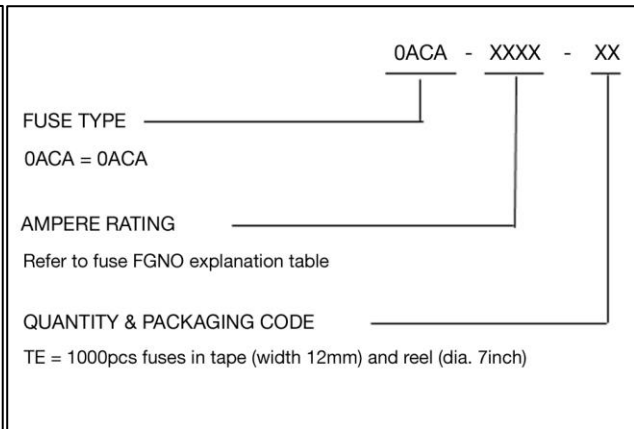
0ACA=0ACA; [XXXX]=Ampere Rating; XX=See Ordering Information as below

Decimal	Amps	Bel FGNO[XXXX]
20	20	9200
25	25	9250
30	30	9300
40	40	9400

Mechanical Dimensions



Ordering Information



Packaging

Packaging Option	Quantity	Packaging Code
Tape (width 12mm) and reel (dia. 7inch)	1000	TE