

Type 0ACF

High Voltage SMD Fuse

0ACF Series

RoHS Compliant

Description

5x5x32mm physical size



Features

- 1500VDC maximum, High voltage and High Breaking Capacity
- RoHS compliant with exemption 7(a)
- Full compliance with EU Directive 2011/65/EU and amending directive 2015/863
- AEC-Q Compliant
- Meets Bel automotive qualification*
- * - Largely based on internal AEC-Q test plan



AEC-Q Compliant
UK CA CE

Physical Specifications

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

Electrical Characteristics

% of Ampere Rating (A)	Operating Time	
	Min	Max
100%	4hours	-
250%	-	120sec

Ratings

Ampere Rating / Voltage Rating	Ampere Range / Volt @ I.R. ability*
800mA / 1500V DC ** 800mA-3A / 1000V DC	800mA/ 1500V @ 10kA DC 800mA-3A / 1000V @ 10kA DC
*I.R.=DC Interrupting Rating (measured at designated voltage, time constant of less than 50 microseconds) ** 800mA Self-certified for 1500Vdc/10kA I.R	

Electrical Specifications

Part Number	Ampere Rating	Voltage and Interrupting Ratings	Typical Cold. Resistance (mohms)	Typical Voltage Drop (mV)	Typical Pre-Arcing I ² t (A ² S)
0ACF-0800-XX	800mA	See Table of Ratings on Page 1 for Voltage and associated Interrupting Ratings	560	500	0.65
0ACF-1000-XX	1A		435	480	1.30
0ACF-2000-XX	2A		140	415	1.5
0ACF-2500-XX	2.5A		106	385	2.5
0ACF-3000-XX	3A		90	390	4.0

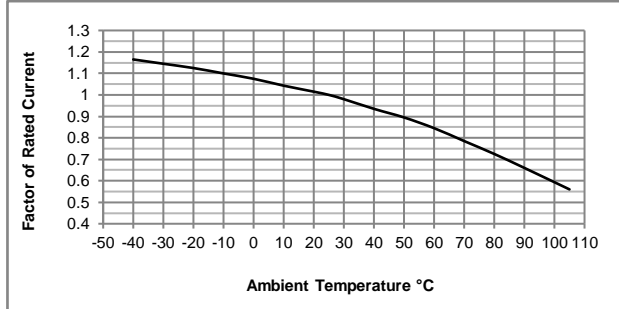
Consult manufacturer for other ratings

DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25 °C

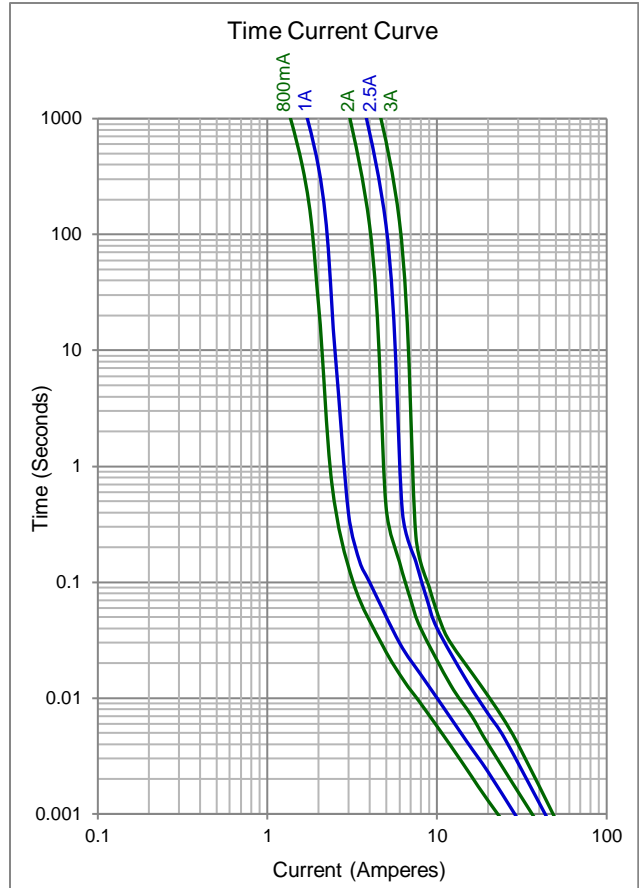
Typical Pre-arcing I²t are measured at 10In Current, DC battery bank.

Temperature Re-Rating Curve

Normal Operating Temperature: 25°C
 Operating Temperature: -40°C to 105°C with proper correction factor applied.



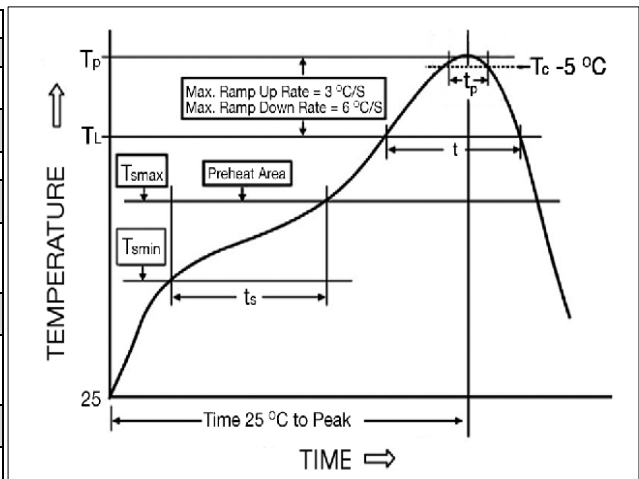
Average Time Current Curve



Soldering Characteristics

Reflow Soldering Condition:

Profile Feature	Lead(Pb) free solder
Preheat and soak	
Temperature min. (T_{smin})	150°C
Temperature max. (T_{smax})	200°C
Time (T_{smin} to T_{smax}) (t_s)	60 - 120 Seconds
Average ramp up rate T_{smax} to T_p	3°C / Second Max.
Liquidous temperature (T_L)	217°C
Time at liquidous (t_l)	60 - 90 Seconds
Peak package body temperature (T_p)	260 ^{+0/-5} °C
Time (t_p) within 5°C of the specified classification temperature (T_c)	20-40 Seconds
Average ramp-down rate (T_p to T_{smax})	6°C / Second Max.
Time (25°C to Peak Temperature)	8 Minutes Max.



Manual Soldering :

- Temperature: 350° C
- Time: 5 Seconds Maximum



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

Type 0ACF

Fuse FGNO Explanation

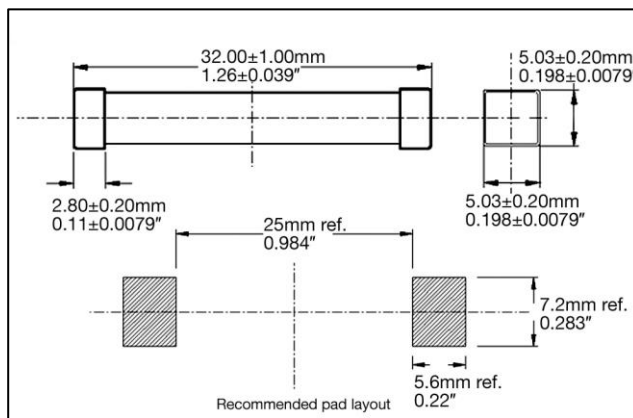
0ACF - [XXXX] -XX

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

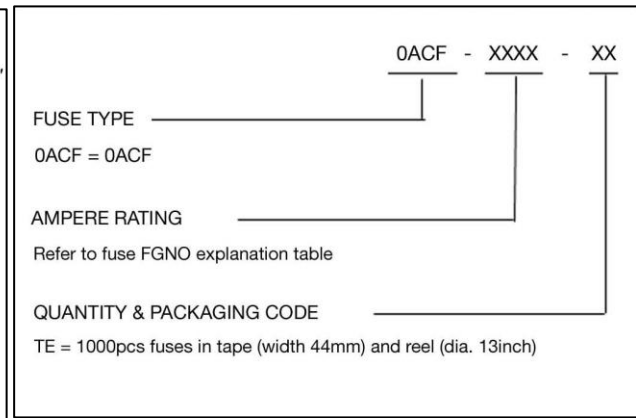
Fraction	Decimal	Milliamps	Bel FGNO[XXXX]
8/10	0.800	800	0800

Decimal	Amps	Bel FGNO[XXXX]
1.0	1	1000
2.0	2	2000
2.5	2.5	2500
3.0	3	3000

Mechanical Dimensions



Ordering Information



Packaging

Packaging Option	Quantity	Packaging Code
Tape (width 44mm) and reel (dia. 13inch)	1000	TE



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