

# 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**

### 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", "Appropriate Safety Logos" and "  ", "  " (China RoHS compliant).

### Electrical Characteristics

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

### Safety Agency Approvals

Safety Agency	Ampere Rating / Voltage Rating	Ampere Range / Volt @ I.R. ability*
	800mA / 1500V DC 800mA / 1000V DC	800mA/ 1500V @ 10kA DC 800mA / 1000V @ 10kA DC
	1A-3A / 1000V DC	1A-3A / 1000V @ 10kA DC
*I.R.=DC Interrupting Rating (measured at designated voltage, time constant of less than 50 microseconds)		

### Electrical Specifications

Part Number	Ampere Rating	Voltage and Interrupting Ratings	Typical Cold. Resistance (mohms)	Typical Voltage Drop (mV)	Typical Pre-Arcing I <sup>2</sup> t (A²S)	Agency Approvals
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	Y
0ACF-2000-XX	2A		140	415	1.5	Y
0ACF-2500-XX	2.5A		106	385	2.5	Y
0ACF-3000-XX	3A		90	390	4.0	Y

Consult manufacturer for other ratings

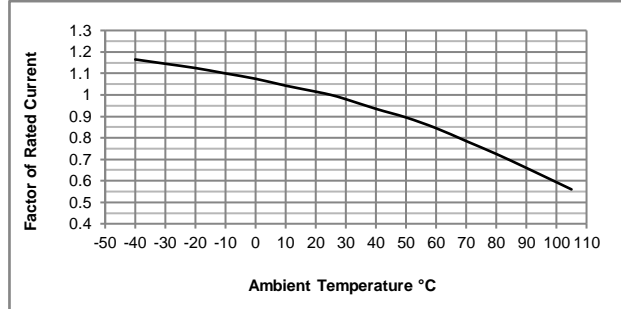
DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25 °C

Typical Pre-arcing I<sup>2</sup>t are measured at 10In Current, DC battery bank.

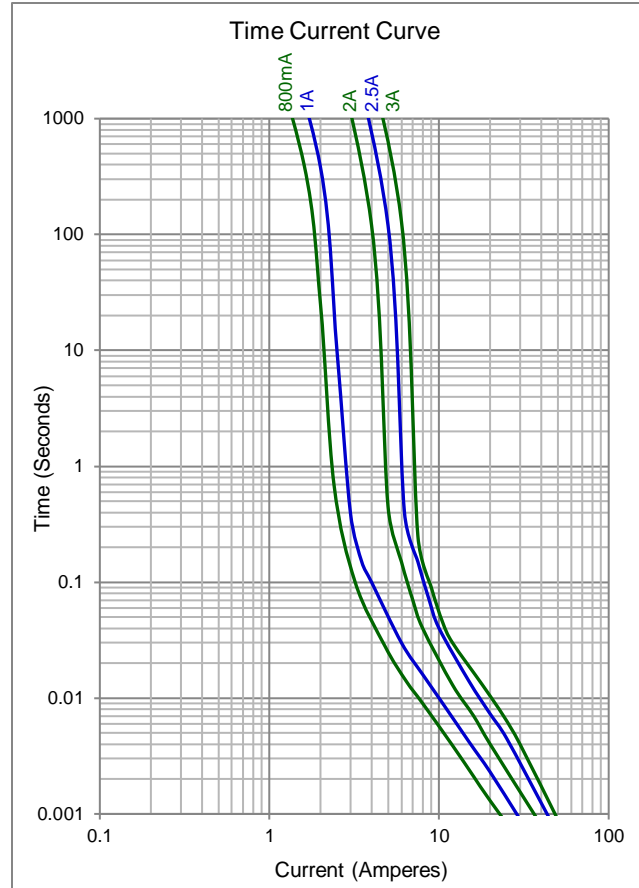
## Temperature Re-Rating Curve

Normal Operating Temperature: 25°C

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



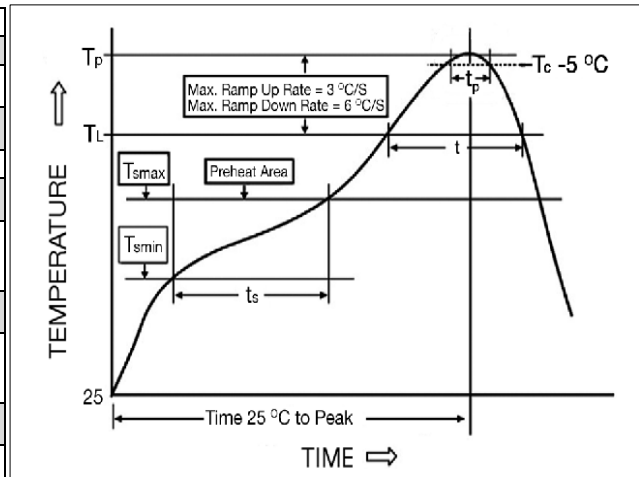
## Average Time Current Curve



## 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 <sup>+0/-5</sup> °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

# Type 0ACF

### Fuse FGNO Explanation

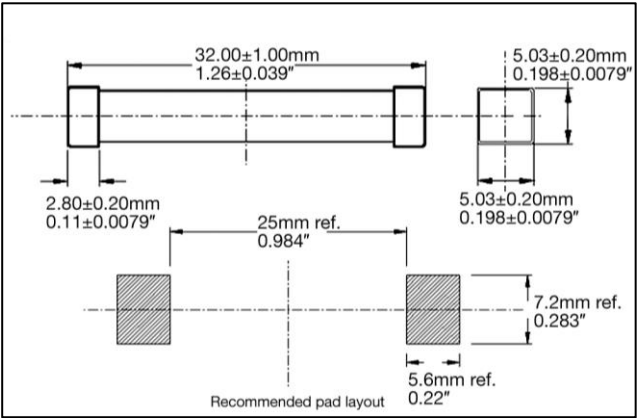
0ACF - [XXXX] -XX

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

0ACF - XXXX - XX

FUSE TYPE \_\_\_\_\_  
0ACF = 0ACF

AMPERE RATING \_\_\_\_\_  
Refer to fuse FGNO explanation table

PACKAGING & QUANTITY CODE \_\_\_\_\_  
TE= 500pcs fuses in tape (width 44mm) and reel (dia. 13inch)

### Packaging

Packaging Option	Quantity	Packaging Code
Tape (width 44mm) and reel (dia. 13inch)	500	TE