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 800V AC	1A-3A / 1000V @ 10kA DC 800V @ 10kA AC
*I.R.=DC Interrupting Rating (measured at designated voltage, time constant of less than 50 microseconds)		

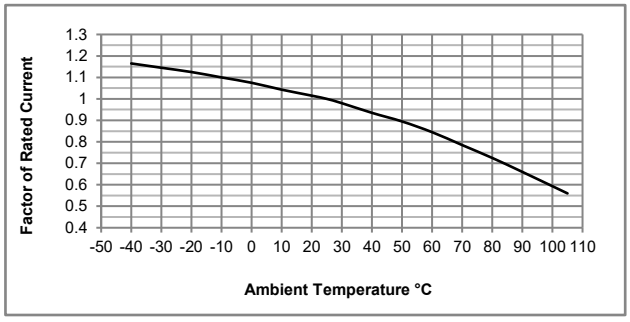
Electrical Specifications

Part Number	Ampere Rating	Voltage and Interrupting Ratings	Typical Cold. Resistance (mohms)	Typical Voltage Drop (mV)	Typical Pre-Arcing I²t (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

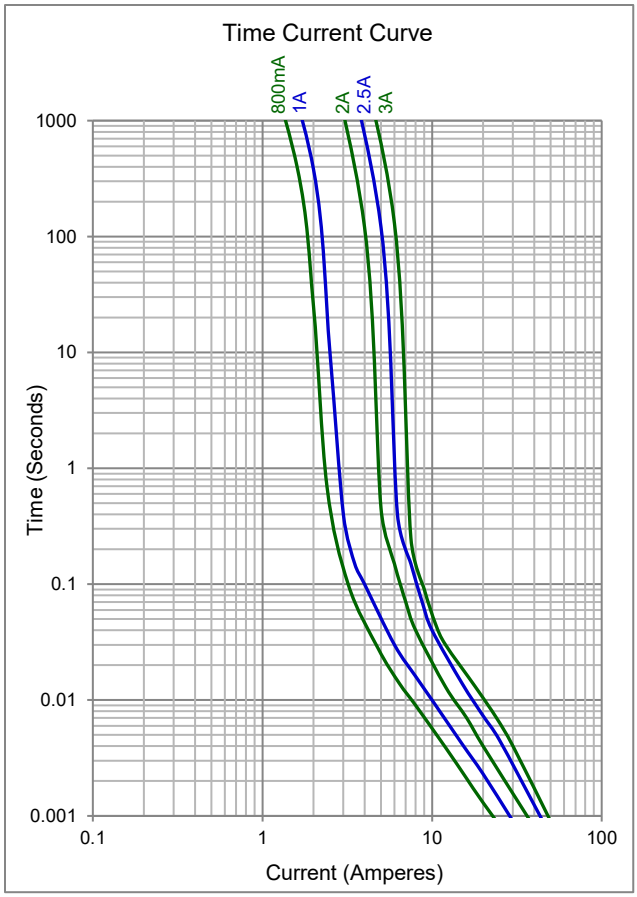
Consult manufacturer for other ratings
DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25℃
Typical Pre-arcing I²t are measured at 10In Current, DC battery bank.

Temperature Re-Rating Curve

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



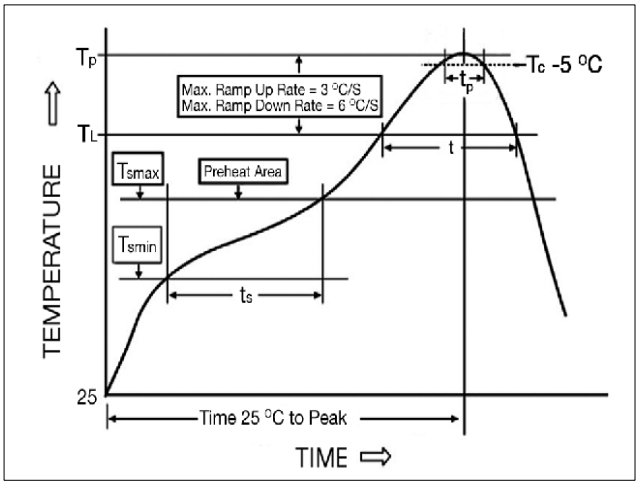
Average Time Current Curve



Soldering Characteristics

Reflow Soldering Condition:

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



Manual Soldering :

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

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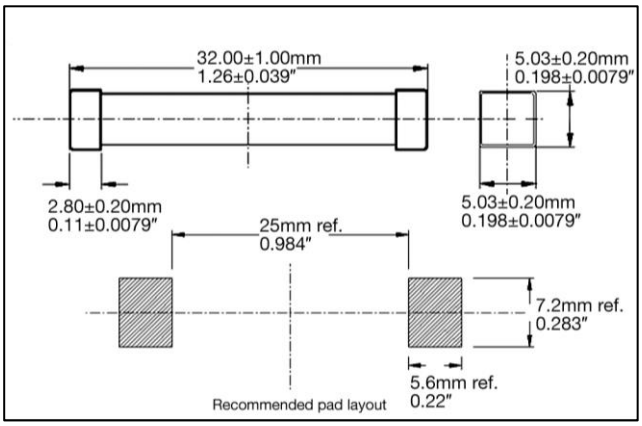
Fuse FGNO Explanation
0ACF - [XXXX] -XX
0ACF=0ACF; [XXXX]=Ampere Rating; XX=See Ordering Information as below

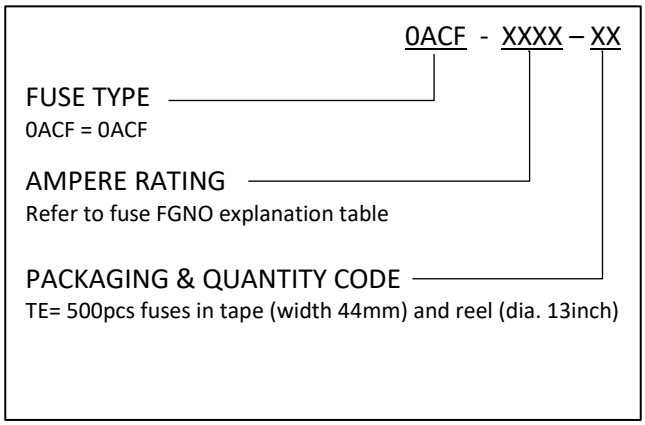
Fraction	Decimal	Milliamps	Bel FGNO[XXXX]
8/10	0.800	800	0800

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)	500	TE

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