

## 240V, BS88-4 Semiconductor Fuse

OAFG Series RoHS Compliant

#### **Description**

BS88-4 style stud-mount Fuse

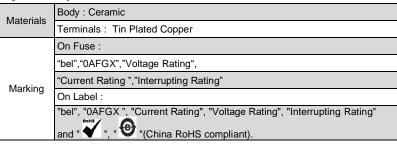
#### **Features**

- High speed semi-conductor fuse
- Full compliance with EU Directive 2011/65/EU and amending directive 2015/863

#### **Applications**

Supplementary protection in appliance AC/DC, DC/DC module for EV/EV charging

#### **Physical Specifications**



#### **Ratings**

Ampere Rating / Voltage Rating	Ampere Range / Volt @ I.R. ability*	
25A -180A / 240V AC 25A -180A / 150V DC	25A - 180A / 240V @ 50kA AC / 150V @ 10kA DC	
*I.R.= Interrupting Rating = Short Circuit Rating(Amps)		

#### **Electrical Characteristics**

Total Cleaning I²t Arc Voltage		Power Loss	
The total clearing I²t at rated voltage and at power factor of 15% are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, Eg, (rms).	This curve gives the peak arc voltage, UL, which may appear across the fuse during its operation as a function of the applied working voltage, Eg, (rms) at a power factor of 15%.	Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the power losses at load currents lower than the rated current. The correction factor, Kp, is given as a function of the RMS load current, lb, in % of the rated current.	
1.6 K 1.4 1.2 1.0 0.8 0.6 0.4 0.2 50 100 150 200 250	750 U <sub>L</sub> 500 250 E <sub>g</sub>	1.0 K <sub>p</sub> 0.8 0.6 0.5 0.4 0.3 0.2 0.1 30 40 50 60 70 80 90 100%	

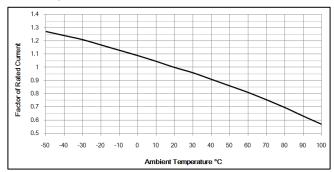


Specifications subject to change without notice

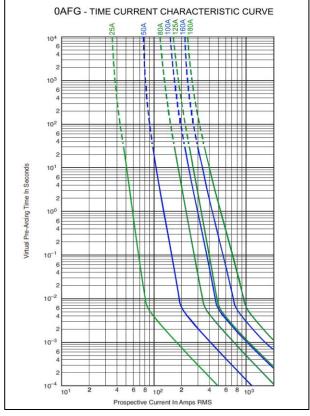
Type 0AFG

#### **Temperature Re-Rating Curve**

#### Operating temperature: -50 $^{\circ}$ C to 100 $^{\circ}$ C



#### **Average Time Current Curve**



**Electrical Specifications** 

2. Court out of control of contro						
Part Number Rated Current	Voltage and	Energy Integrals I2t (A <sup>2</sup> S)			Power loss	
r art ivumber	t Number (RMS-A) Interrupting Ratings		Pre-Arcing	Clearing at 120V	Clearing at 240V	(W)
0AFGx9250Sxx	25A	See Table of Ratings on Page 1 for Voltage and associated Interrupting Ratings	18	120	250	4
0AFGx9500Sxx	50A		100	500	1400	7
0AFGx9800Sxx	80A		300	1900	3800	10
0AFGxK100Sxx	100A		600	3800	7500	10
0AFGxK125Sxx	125A		600	3800	7500	16
0AFGxK160Sxx	160A		1100	7000	16000	20
0AFGxK180Sxx	180A		1600	12000	29000	21

Consult manufacturer for other ratings

- -Typical Pre-arcing I2t are measured at 10In Current
- -Power loss provided at rated current

#### Conditions for operation in service

Where the following conditions apply, fuses complying with this standard are deemed capable of operating satisfactorily without further qualification.

Normal temperature: -5°C to 40°C;

The altitude of the site of installation of the fuses does not exceed 2000m above sea level;

The air is clean and the relative humidity does not exceed 50 % at the maximum temperature of 40  $^{\circ}\mathrm{C}$ ;

Higher relative humidities are permitted at lower temperatures, e.g. 90 % at 20℃;

Under these conditions, moderate condensation may occasionally occur due to variation in temperature.

For operation conditions other than above, please contact manufacturer.



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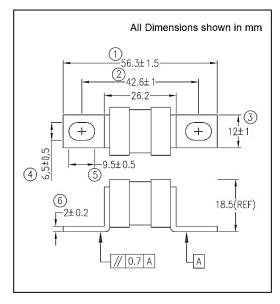
Bel Fuse Inc. 206 Van Vorst Street Jersey City, NJ 07302 USA +1 201.432.0463 Bel.US.CS@belf.com belfuse.com/circuit-protection Type 0AFG

# Fuse FGNO Explanation 0AFG X [XXXX] -XX

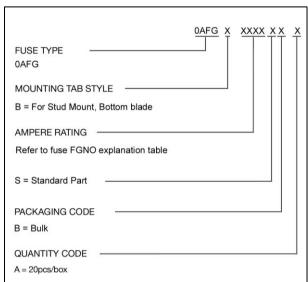
# 0AFGB=0AFGB; [XXXX]=Ampere Rating; XX=See Ordering Information as below

Amps	Bel FGNO[XXXX]	
25	9250	
50	9500	
80	9800	
100	K100	
125	K125	
160	K160	
180	K180	

#### **Mechanical Dimensions**



#### **Ordering Information**



#### **Packaging**

Packaging Option	Quantity	Packaging Code
Bulk	20pcs/box	ВА



Specifications subject to change without notice

Rev. 0AFG Dec17 2020

# **Mouser Electronics**

**Authorized Distributor** 

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## Bel:

<u>0AFGB9250SBA</u> <u>0AFGB9500SBA</u> <u>0AFGB9800SBA</u> <u>0AFGBK100SBA</u> <u>0AFGBK125SBA</u> <u>0AFGBK160SBA</u> 0AFGBK180SBA