

# ANTREX Electronics

Electronic Components Sourcing Information

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## Product Reference Information

**Part Number:** 0ACG-3150-TE  
**Manufacturer:** Bel Fuse Inc.  
**Package:** Tape & Reel (TR), Cut Tape (CT), Digi-Reel®  
**Availability:** Please confirm with sales

### Product Page:

<https://antrexco.com/product/details/bel-fuse-inc/0acg-3150-te.html>

### Request a Quote:

[Submit RFQ for this part](#)



Scan for product page

## Contact Information

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## Quality & Trust

New & Original Components

Supplier verification and packaging condition review

CoC / RoHS / REACH documents available on request

Secure sourcing support for OEM / EMS projects

### Note:

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.

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# Type 0ACG

## 500VDC, SMD Fuse

HF 0ACG Series

RoHS Compliant

### Features

- Surface mount design to save space
- Ceramic tube, silver plated cap construction
- Compatible with 260 °C, IR Pb-free solder process
- Wide operating temperature range, -40°C to 125°C
- Tape & Reel for auto-insert SMD process
- MSL = 1
- Complies with IEC 60127-7 standard
- 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

### Applications

- Battery Management Systems, (BMS)
- Li-ion Battery Packs
- DC-DC Converters

HALOGEN FREE = HF

### Physical Specifications

|           |                                                                                                                                                                                                                                                                                                                         |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Materials | Body : Ceramic                                                                                                                                                                                                                                                                                                          |
|           | Cap : Silver plated copper                                                                                                                                                                                                                                                                                              |
| Marking   | On Fuse :                                                                                                                                                                                                                                                                                                               |
|           | "Current Rating"                                                                                                                                                                                                                                                                                                        |
|           | On Label :                                                                                                                                                                                                                                                                                                              |
|           | "bel", "0ACG", "Current Rating", "Voltage Rating", "Interrupting Rating",<br>"Appropriate Safety Logos" and "  ", "  "(China RoHS compliant). |

### Electrical Characteristics

| % of Ampere Rating (A) | Operating Time |         |
|------------------------|----------------|---------|
|                        | Min            | Max     |
| 125%                   | 1 hour         | -       |
| 200%                   | -              | 120 sec |
| 1000%                  |                | 1 sec   |

### Safety Agency Approvals

| Safety Agency                                                                                                                                                                                      | Ampere Rating / Voltage Rating | Ampere Range / Volt @ I.R. ability** |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------|
|                                                                                                                 | 1-3.15A/500V DC                | 1-3.15A/500V @ 100A DC               |
|                                                                                                                                                                                                    | /350V DC                       | /350V @1500A DC                      |
|                                                                                                                                                                                                    | /350V AC                       | /350V @ 100A AC                      |
|                                                                                                                                                                                                    | 4-5A/450V DC                   | 4-5A/450V @ 100A DC                  |
|                                                                                                                                                                                                    | /125V DC                       | /125V @ 1500A DC                     |
|                                                                                                                                                                                                    | /350V AC                       | /350V @ 100A AC                      |
| ** AC Interrupting Rating (measured at designated voltage, 100% power factor); DC Interrupting Rating (measured at designated voltage, time constant of less than 50 microseconds, battery source) |                                |                                      |

## Electrical Specifications

| Part Number  | Ampere Rating | Alpha Mark | Voltage and Interrupting Ratings                                               | Typical Cold. Resistance (mohms)** | Typical Voltage Drop (mV) | Typical Pre-Arcing I <sup>2</sup> t (A <sup>2</sup> Sec)*** |
|--------------|---------------|------------|--------------------------------------------------------------------------------|------------------------------------|---------------------------|-------------------------------------------------------------|
| 0ACG-1000-XX | 1A            | 1          | See Table of Ratings on Page 1 for Voltage and associated Interrupting Ratings | 220                                | 220                       | 0.50                                                        |
| 0ACG-1250-XX | 1.25A         | 1.25       |                                                                                | 140                                | 210                       | 0.95                                                        |
| 0ACG-1600-XX | 1.6A          | 1.6        |                                                                                | 90                                 | 190                       | 2.3                                                         |
| 0ACG-2000-XX | 2A            | 2          |                                                                                | 70                                 | 185                       | 4.1                                                         |
| 0ACG-2500-XX | 2.5A          | 2.5        |                                                                                | 40                                 | 120                       | 2.6                                                         |
| 0ACG-3150-XX | 3.15A         | 3.15       |                                                                                | 31.5                               | 140                       | 3.3                                                         |
| 0ACG-4000-XX | 4A            | 4          |                                                                                | 24.5                               | 140                       | 5.5                                                         |
| 0ACG-5000-XX | 5A            | 5          |                                                                                | 17.5                               | 130                       | 11.5                                                        |

Consult manufacturer for other ratings

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

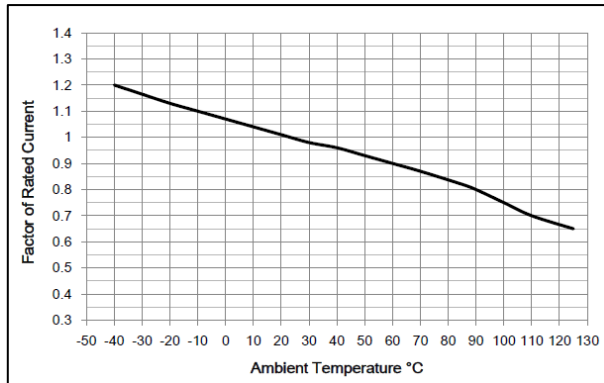
\*\*\* Typical Pre-arcing I<sup>2</sup>t are measured at 10In Current, DC battery bank.

## Temperature derating curve

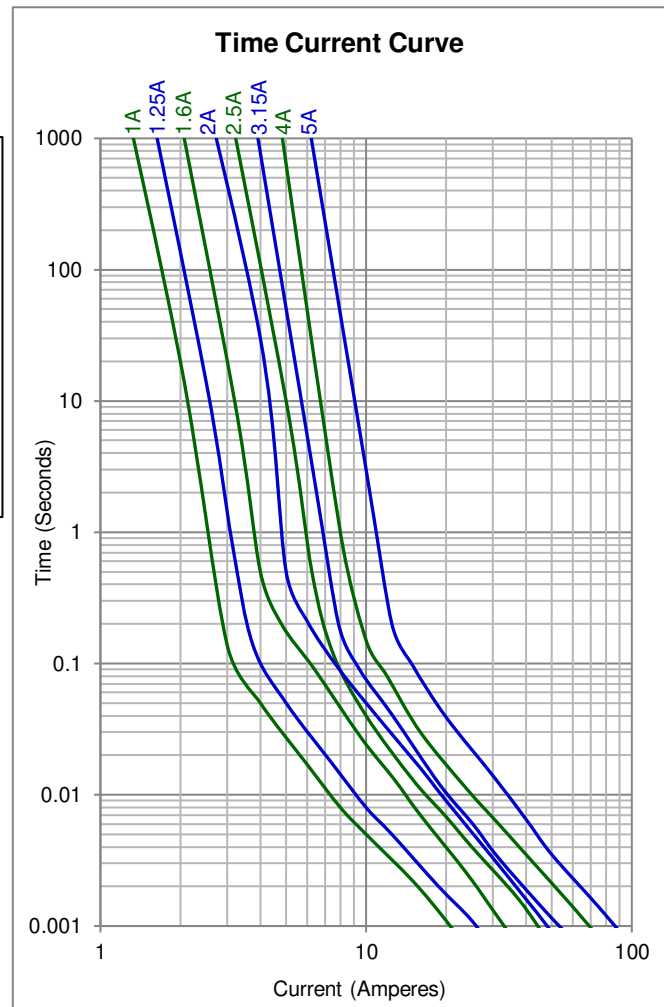
Normal Operating Temperature: 25°C ± 2°C

Operating Temperature: -40°C to 125°C with proper correction factor applied.

Chart of correction factor



## Time Current Curve



## Soldering Characteristics

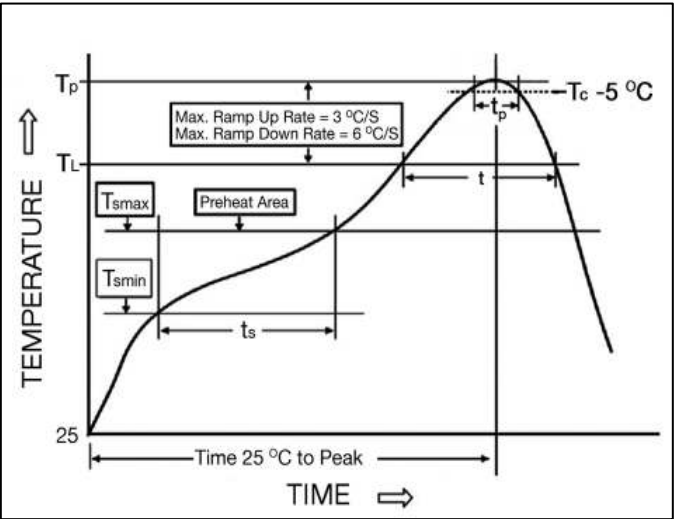
### Reflow Soldering

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

### Manual Soldering (not recommended)

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

| Profile Feature                                                                 |                             |
|---------------------------------------------------------------------------------|-----------------------------|
| <b>Preheat &amp; Soak</b>                                                       | <b>Lead(Pb) free solder</b> |
| 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 – 150 seconds            |
| Peak package body temperature ( $T_p$ )                                         | 260°C max                   |
| Time ( $t_p$ ) within 5°C of the specified classification temperature ( $T_c$ ) | 30 seconds                  |
| Average ramp-down rate( $T_p$ to $T_{smax}$ )                                   | 6°C / second max.           |
| Time 25°C to peak temperature                                                   | 8 minutes max.              |



# Type 0ACG

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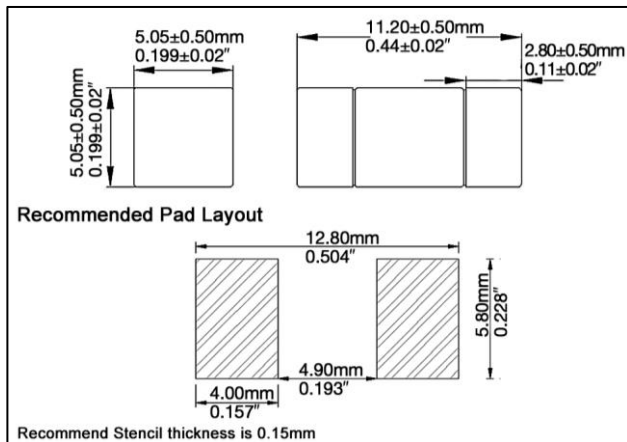
## Fuse FGNO Explanation

0ACG - [XXXX] -XX

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

| Fraction | Decimal | Amps | Bel FGNO[XXXX] |
|----------|---------|------|----------------|
|          | 1.0     | 1    | 1000           |
| 1-1/4    | 1.25    | 1.25 | 1250           |
|          | 1.6     | 1.6  | 1600           |
|          | 2.0     | 2    | 2000           |
| 2-1/2    | 2.5     | 2.5  | 2500           |
|          | 3.15    | 3.15 | 3150           |
|          | 4.0     | 4    | 4000           |
|          | 5.0     | 5    | 5000           |

## Mechanical Dimensions



## Ordering Information

0ACG - XXXX - XX

FUSE TYPE \_\_\_\_\_

0ACG = 0ACG

AMPERE RATING \_\_\_\_\_

Refer to fuse FGNO explanation table

QUANTITY & PACKAGING CODE \_\_\_\_\_

TE = 1000pcs fuses in tape (width 24mm) and reel (dia. 13inch)

## Packaging

| Packaging Option                         | Quantity | Packaging Code |
|------------------------------------------|----------|----------------|
| Tape (width 24mm) and reel (dia. 13inch) | 1000     | TE             |