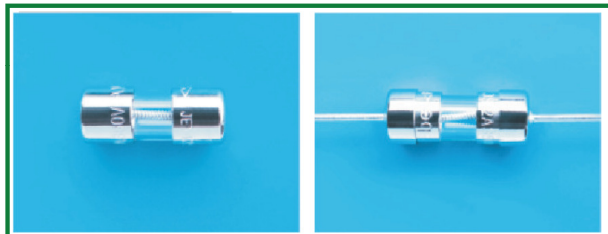


# Type 2JS / 3JS Time-lag Fuse Series

5 x 15mm Glass Tube  
RoHS 6 Compliant

HF Pb 2JS / 3JS Series, 5 x 15mm Time-lag Fuse



## Description

5x15 mm Time-lag ,glass tube body cartridge fuse designed, approved and complied with UL and CSA standard 248-14.

## Electrical Characteristics (UL / CSA STD.248-14)

| Testing current | Blow Time |          |
|-----------------|-----------|----------|
|                 | Minimum   | Maximum  |
| 100%            | 4 hrs.    | N/A      |
| 135%            | N/A       | 1 hr     |
| 200%            | 3 sec     | 20 sec   |
| 500%            | 100 msec  | 1.5 sec  |
| 1000%           | 30 msec   | 300 msec |

## Features

- Meet UL and CSA standard 248-14
- Wide operating temperature range
- Bulk and Tape & Reel packing available
- RoHS6 compliant
- Halogen Free
- Leadfree

## Applications

Provide individual protection for components or internal circuits.

- Power Supplies
- Battery charger
- Monitor
- Adapter

LEAD FREE =

HALOGEN FREE =

## Safety Agency Approvals

| SAFETY AGENCY | SAFETY AGENCY CERTIFICATE NUMBER           | AMPERE RANGE / VOLT @ I.R.ABILITY                                                         |
|---------------|--------------------------------------------|-------------------------------------------------------------------------------------------|
|               | E20624                                     | 100mA - 7A / 350V AC @100A<br>100mA - 7A / 125V AC @10,000A<br>100mA - 7A / 140V DC @150A |
|               | LR39772                                    | 100mA - 7A / 350V AC @100A<br>100mA - 7A / 125V AC @10,000A                               |
|               | JET 1037-31003-1010<br>JET 1037-31003-1011 | 1A - 5A / 125V AC @500A                                                                   |
|               | JET 1037-31003-1007                        | >5A - 15A / 125V AC @300A                                                                 |
|               |                                            | 100mA - 7A / 350V AC @100A<br>100mA - 7A / 125V AC @10,000A<br>100mA - 7A / 140V DC @150A |

Specifications subject to change without notice

# Type 2JS / 3JS Time-lag Fuse Series

5 x 15 mm Glass Tube  
RoHS 6 Compliant



# bel

JS May2012D

## Electrical Specifications

| Catalog Number | Ampere Rating | Typical Cold Resistance (ohm) | Volt-drop @100% In (Volt) Max. | Voltage Rating (V) | Interrupting Rating                                                                       | Melting I2T <10 m Sec (A2 Sec) | Melting I2T @ 10 In (A2 Sec) | Maximum Power Dissipation (W) | Agency Approvals |   |   |   |
|----------------|---------------|-------------------------------|--------------------------------|--------------------|-------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------------------|------------------|---|---|---|
|                |               |                               |                                |                    |                                                                                           |                                |                              |                               |                  |   |   |   |
| JS 100-R       | 100mA         | 13.5                          | 2.42                           | 350                | 100mA - 7A / 350V AC @100A<br>100mA - 7A / 125V AC @10,000A<br>100mA - 7A / 140V DC @150A | 0.068                          | 0.088                        | 0.22                          | Y                | Y |   | Y |
| JS 125-R       | 125mA         | 7.7                           | 1.68                           | 350                |                                                                                           | 0.107                          | 0.138                        | 0.24                          | Y                | Y |   | Y |
| JS 150-R       | 150mA         | 5.6                           | 1.56                           | 350                |                                                                                           | 0.167                          | 0.216                        | 0.27                          | Y                | Y |   | Y |
| JS 200-R       | 200mA         | 3.5                           | 1.20                           | 350                |                                                                                           | 0.26                           | 0.34                         | 0.30                          | Y                | Y |   | Y |
| JS 250-R       | 250mA         | 2.3                           | 0.96                           | 350                |                                                                                           | 0.41                           | 0.53                         | 0.34                          | Y                | Y |   | Y |
| JS 300-R       | 300mA         | 1.5                           | 0.78                           | 350                |                                                                                           | 0.64                           | 0.83                         | 0.36                          | Y                | Y |   | Y |
| JS 350-R       | 350mA         | 1.1                           | 0.67                           | 350                |                                                                                           | 0.80                           | 1.0                          | 0.40                          | Y                | Y |   | Y |
| JS 400-R       | 400mA         | 0.86                          | 0.59                           | 350                |                                                                                           | 0.99                           | 1.3                          | 0.42                          | Y                | Y |   | Y |
| JS 500-R       | 500mA         | 0.62                          | 0.53                           | 350                |                                                                                           | 1.6                            | 2.0                          | 0.47                          | Y                | Y |   | Y |
| JS 600-R       | 600mA         | 0.44                          | 0.53                           | 350                |                                                                                           | 2.2                            | 2.3                          | 0.49                          | Y                | Y |   | Y |
| JS 700-R       | 700mA         | 0.32                          | 0.42                           | 350                |                                                                                           | 3.0                            | 4.0                          | 0.54                          | Y                | Y |   | Y |
| JS 750-R       | 750mA         | 0.28                          | 0.38                           | 350                |                                                                                           | 3.0                            | 4.0                          | 0.55                          | Y                | Y |   | Y |
| JS 800-R       | 800mA         | 0.23                          | 0.37                           | 350                |                                                                                           | 5.0                            | 7.0                          | 0.60                          | Y                | Y |   | Y |
| JS 1-R         | 1A            | 0.19                          | 0.36                           | 350                |                                                                                           | 5.9                            | 7.8                          | 0.64                          | Y                | Y | Y | Y |
| JS 1.25-R      | 1.25A         | 0.13                          | 0.30                           | 350                |                                                                                           | 9.3                            | 12                           | 0.71                          | Y                | Y | Y | Y |
| JS 1.5-R       | 1.5A          | 0.094                         | 0.23                           | 350                |                                                                                           | 15                             | 19                           | 0.80                          | Y                | Y | Y | Y |
| JS 2-R         | 2A            | 0.063                         | 0.22                           | 350                |                                                                                           | 23                             | 30                           | 0.89                          | Y                | Y | Y | Y |
| JS 2.5-R       | 2.5A          | 0.046                         | 0.21                           | 350                |                                                                                           | 35                             | 46                           | 0.99                          | Y                | Y | Y | Y |
| JS 3-R         | 3A            | 0.037                         | 0.19                           | 350                |                                                                                           | 55                             | 72                           | 1.10                          | Y                | Y | Y | Y |
| JS 3.5-R       | 3.5A          | 0.030                         | 0.18                           | 350                |                                                                                           | 69                             | 91                           | 1.16                          | Y                | Y | Y | Y |
| JS 4-R         | 4A            | 0.026                         | 0.18                           | 350                |                                                                                           | 86                             | 114                          | 1.22                          | Y                | Y | Y | Y |
| JS 5-R         | 5A            | 0.018                         | 0.16                           | 350                |                                                                                           | 135                            | 179                          | 1.36                          | Y                | Y | Y | Y |
| JS 6-R         | 6A            | 0.015                         | 0.16                           | 350                |                                                                                           | 211                            | 279                          | 1.51                          | Y                | Y | Y | Y |
| JS 7-R         | 7A            | 0.012                         | 0.15                           | 350                |                                                                                           | 263                            | 350                          | 1.60                          | Y                | Y | Y | Y |

Consult manufacturer for other ratings

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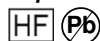
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# Type 2JS / 3JS Time-lag Fuse Series

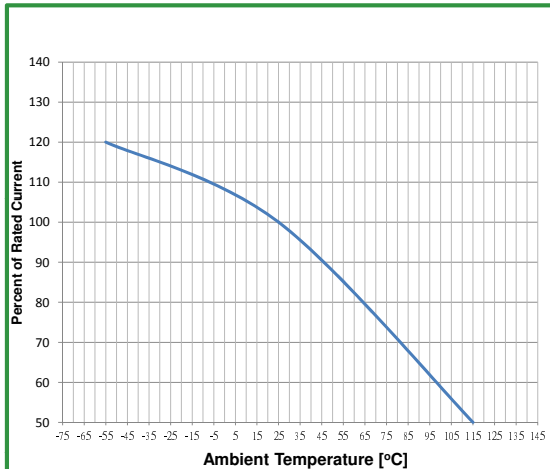
5 x 15 mm Glass Tube  
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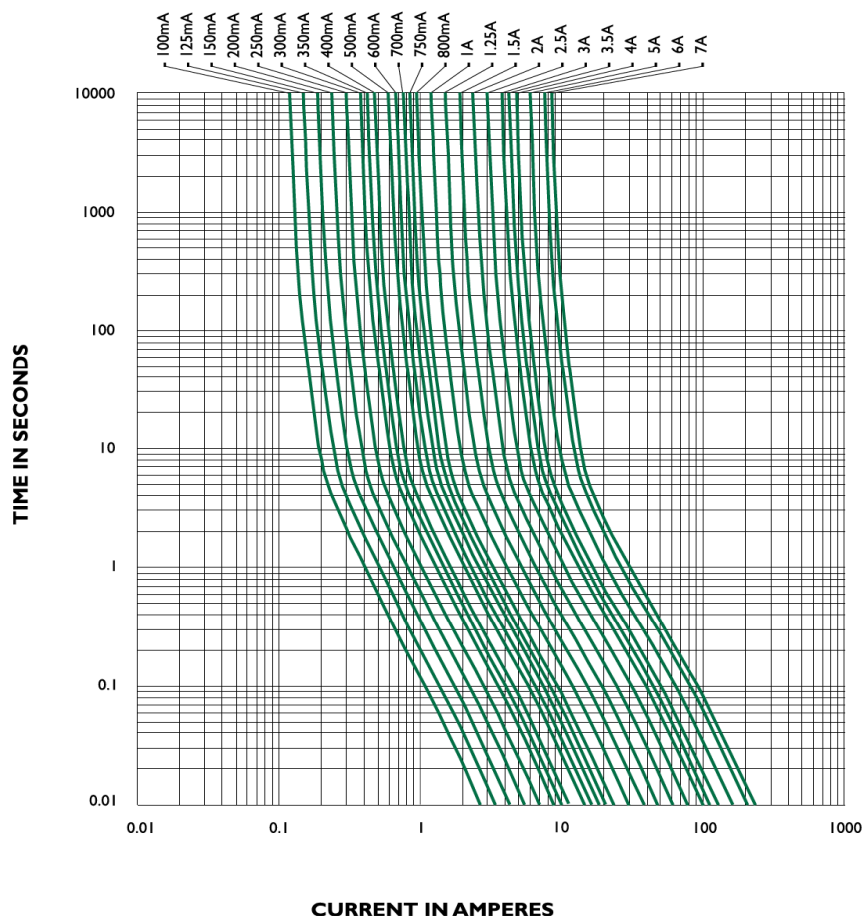
JS May 2012C

## Temperature Derating Curve



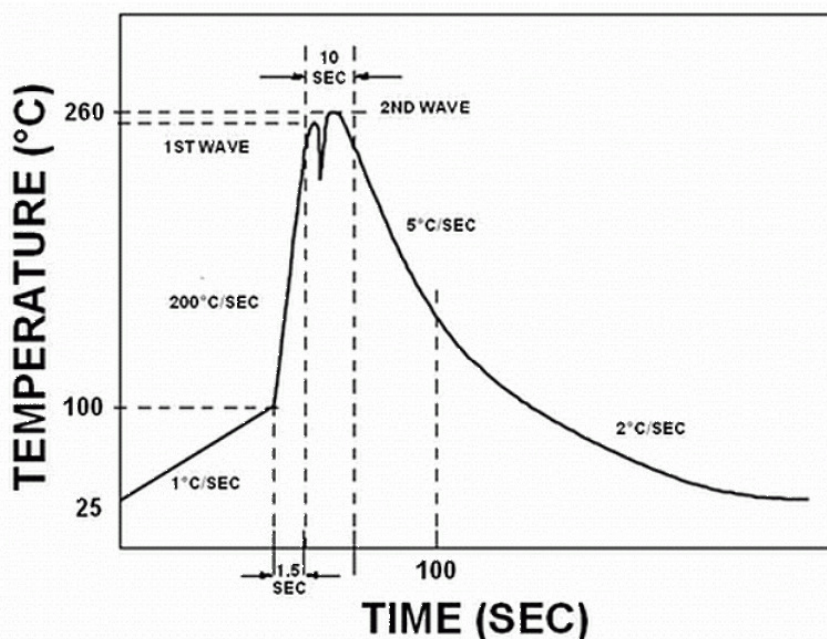
## Average Time Current Curve

### 2JS / 3JS - TIME CURRENT CHARACTERISTIC CURVE



## Soldering Parameters

| Lead-free Wave Soldering Profile                    |                                                |
|-----------------------------------------------------|------------------------------------------------|
| Wave Soldering Parameter                            |                                                |
| Average ramp-up rate                                | 200°C / second                                 |
| Heating rate during preheat                         | typical 1 - 2 °C / second<br>Max. 4°C / second |
| Final preheat temperature                           | within 125°C of soldering temperature          |
| Peak temperature T <sub>p</sub>                     | 260°C                                          |
| Time within +0 °C / -5°C of actual peak temperature | 10 seconds                                     |
| Ramp-down rate                                      | 5 °C / second max.                             |



# Type 2JS / 3JS Time-lag Fuse Series

5 x 15 mm Glass Tube  
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# bel

JS May2012D

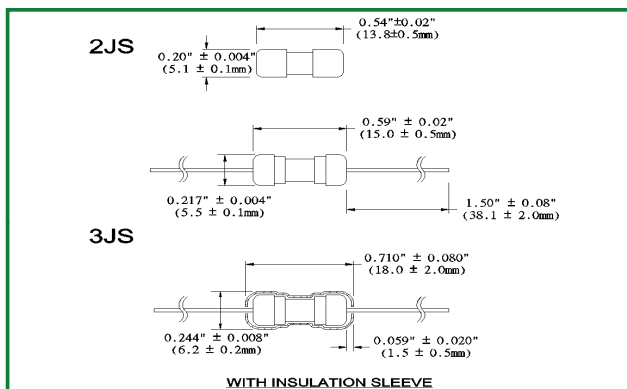
## Physical Specifications

|                  |                                                                                                                                                 |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Materials</b> | Body : Glass                                                                                                                                    |
|                  | Cap : Nickel Plated Brass Caps                                                                                                                  |
|                  | Leads: Matte Tin Plated Copper                                                                                                                  |
| <b>Marking</b>   | On Fuse:                                                                                                                                        |
|                  | "bel" , "JS" , " Current Rating", "Voltage Rating",                                                                                             |
|                  | "Appropriate Safety Logos", " (RoHS 6 compliant)                                                                                                |
|                  | On label:                                                                                                                                       |
|                  | "bel" , "2JS", or "3JS", "Current Rating", "Voltage Rating", "Interrupting Rating",<br>"Appropriate Safety Logos" and " (China RoHS compliant). |

## Environmental Specifications

|                                  |                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Shock Resistance</b>          | MIL-STD-202G, Method 213B, Test Condition I<br>(100 G's peak for 6 milliseconds; Sawtooth Waveform) |
| <b>Vibration Resistance</b>      | MIL-STD-202G, Method 201A (10-55 Hz, 0.06 inch, total excursion).                                   |
| <b>Salt Spray Resistance</b>     | MIL-STD-202G, Method 101E, Test condition B (48 hrs).                                               |
| <b>Insulation Resistance</b>     | MIL-STD-202G, Method 302, Test Condition A<br>(After Opening) 10,000 ohms minimum.                  |
| <b>Solderability</b>             | MIL-STD-202G, Method 208H                                                                           |
| <b>Resistance to solder Heat</b> | MIL-STD-202G Method 210F, Test Condition B. (260+/-5 °C, 10+/- 1 sec)                               |
| <b>Thermal Shock</b>             | MIL-STD-202G, Method 107G, Test Condition B<br>(-65°C to +125°C).                                   |
| <b>Operating Temperature</b>     | -55°C to +125°C                                                                                     |
| <b>Terminal Strength</b>         | IEC-68-2-21                                                                                         |

## Mechanical Dimensions



\* Diameter lead 0.032" for all ratings

## Ordering Information

|                                      |                                                                                                                                             |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| <b>FUSE TYPE</b>                     | 0658                                                                                                                                        |
| <b>R</b>                             | R = RoHS Compliant                                                                                                                          |
| <b>AMPERE RATING</b>                 | Refer to fuse FGNO explanation table                                                                                                        |
| <b>PIGTAIL CODE</b>                  | 0 = No pigtail ( 2JS)<br>1 = Standard (axial leaded)<br>4 = Axial leaded with insulation sleeve                                             |
| <b>QUANTITY &amp; PACKAGING CODE</b> | 1 = 200 pcs / Bulk bag, 2K / Box ,Cartridge Type Fuse<br>= 500 pcs/ Bulk bag / box, Pigtail Type Fuse<br>2 = 1500 pcs / Reel, Tape and Reel |

Specifications subject to change without notice

## Packaging

| Packaging Option                                | Packaging Specification | Quantity | Packaging Code | Inside Tape Spacing |
|-------------------------------------------------|-------------------------|----------|----------------|---------------------|
| Bulk (bag)                                      | N/A                     | 200      | 01             | N/A                 |
| Bulk (Pigtail Type)                             | N/A                     | 500      | 11             | N/A                 |
| Bulk (Pigtail Type) with Insulation Sleeve      | N/A                     | 500      | 41             | N/A                 |
| Tape & Reel, 10 mm Pitch                        | EIA-296-F               | 1500     | 12             | 53                  |
| Tape & Reel with Insulation Sleeve, 10 mm Pitch | EIA-296-F               | 1500     | 42             | 53                  |

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