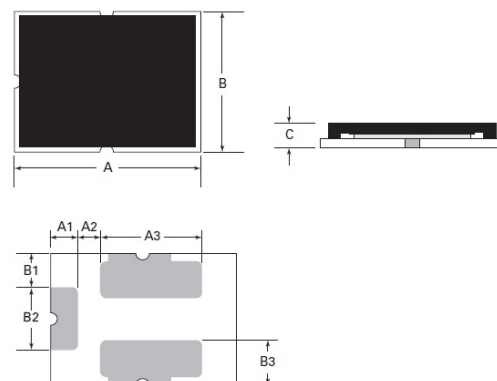


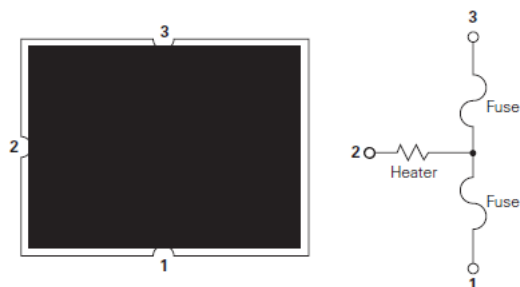
## Specification Status: Released

**TABLE I. Electrical Rating:**

|                               |                                                                               |
|-------------------------------|-------------------------------------------------------------------------------|
| <b>Current</b>                | 100% x $I_{rated}$                                                            |
| <b>Capacity</b>               | No Melting                                                                    |
| <b>Cut Time</b>               | 200% x $I_{rated}$<br>< 1 min                                                 |
| <b>Interrupting Current</b>   | 5 x $I_{rated}$ , power on 5 ms, power off 995 ms, 10000 cycles<br>No Melting |
| <b>Over Voltage Operation</b> | In operation voltage range, the fusing time is <1min.                         |



### Device Circuit:



**TABLE II. DIMENSIONS (mm):**

|    |            |
|----|------------|
| A  | 4.00 ± 0.2 |
| B  | 3.00 ± 0.3 |
| C  | 0.90 max   |
| A1 | 0.58 ± 0.1 |
| A2 | 0.50 ± 0.1 |
| A3 | 2.20 ± 0.1 |
| B1 | 0.80 ± 0.1 |
| B2 | 1.44 ± 0.1 |
| B3 | 1.03 ± 0.1 |

**TABLE III. Electrical Specification:**

| Part Number  | Marking | $I_{rated}$<br>(A) | Cells in series | $V_{max}$<br>(V <sub>DC</sub> ) | $I_{break}$<br>(A) | $V_{OP}$<br>(V) | Resistance          |                    | Agency Approval                                                                       |                                                                                       |
|--------------|---------|--------------------|-----------------|---------------------------------|--------------------|-----------------|---------------------|--------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|              |         |                    |                 |                                 |                    |                 | $R_{heater}$<br>(Ω) | $R_{fuse}$<br>(mΩ) |  |  |
| ITV4030L0415 | LF0415  | 15                 | 1               | 36                              | 50                 | 3.0 ~ 4.5       | 0.6 ~ 1.5           | 1.0 ~ 3.0          | Pending                                                                               | Pending                                                                               |

**Notes:**

$I_{rated}$ : Current carrying capacity that is measured at 40°C thermal equilibrium condition.

$I_{break}$ : The current that the fuse element is able to interrupt.

$V_{max}$ : The maximum voltage that can be cut off by fuse.

$V_{OP}$ : Range of operation voltage.

$R_{heater}$ : The resistance of the heating element.

$R_{fuse}$ : The resistance of the fuse element.

Cells in series: Number of battery cells connected in series in the circuit for ITV device to protect.

• Value specified is determined by using the PWB with 2mm\*2oz copper traces, AWG18 covered wire, and 0.6mm glass epoxy PCB.

**Materials Information:****ROHS Compliant**Directive 2011/65/EU  
Compliant**ELV Compliant**Directive 2000/53/EC  
Compliant**Halogen Free\***

\* Halogen Free refers to: Br≤900ppm, Cl≤900ppm, Br+Cl≤1500ppm.

**Environmental Specifications:**

|                              |                                                                                                    |
|------------------------------|----------------------------------------------------------------------------------------------------|
| <b>Storage Temperature</b>   | 0~35°C, ≤ 70%RH<br>3 months after shipment                                                         |
| <b>Operating Temperature</b> | -10°C to +65°C                                                                                     |
| <b>Hot Passive Aging</b>     | 100±5°C, 250 hours<br>No structural damage and functional failure                                  |
| <b>Humidity Aging</b>        | 60°C±2°C, 90~95%R.H. 250 hours<br>No structural damage and functional failure                      |
| <b>Cold Passive Aging</b>    | -20±3°C, 500 hours<br>No structural damage and functional failure                                  |
| <b>Thermal Shock</b>         | MIL-STD-202 Method 107G<br>+125°C /-55°C, 100 times<br>No structural damage and functional failure |

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