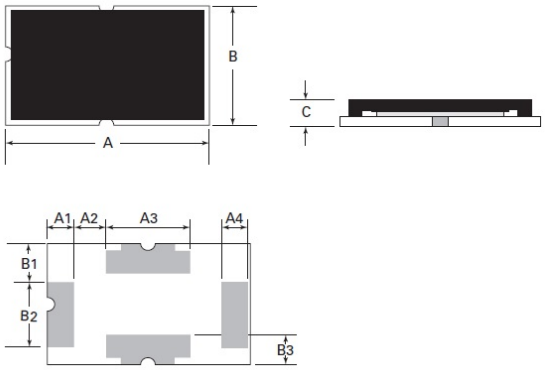
ITV Devices

SMT Battery Protection Device

Specification Status: Released

TABLE I. Electrical Rating:

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



Device Circuit:

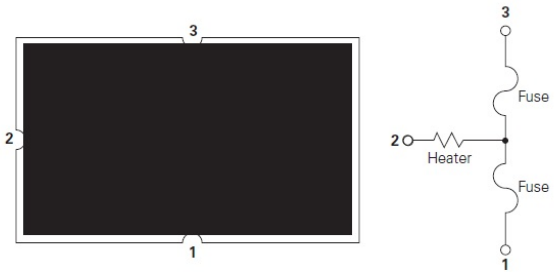


TABLE II. DIMENSIONS (mm):

A	5.40 ± 0.2
B	3.20 ± 0.3
C	1.80 max
A1	0.72 ± 0.1
A2	0.81 ± 0.1
A3	2.20 ± 0.1
A4	0.72 ± 0.1
B1	1.05 ± 0.1
B2	1.70 ± 0.1
B3	0.77 ± 0.1

TABLE III. Electrical Specification:

Part Number	Marking	I_{rated} (A)	Cells in series	V_{max} (V_{DC})	I_{break} (A)	V_{OP} (V)	Resistance		Agency Approval	
							R_{heater} (Ω)	R_{fuse} (mΩ)	c UL us	TÜVRheinland
ITV5432L1230	LF1230	30	3	62	80	9.9 ~ 13.5	4.5 ~ 7.3	0.5 ~ 2.5	Pending	Pending

Notes:

$I_{rated:}$ Current carrying capacity that is measured at 40ºC 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 29.4mm*2oz copper traces, AWG10 covered wire, and 0.6mm glass epoxy PCB.

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Specifications are subject to change without notice.

Materials Information:

ROHS Compliant

Directive 2011/65/EU Compliant

ELV Compliant

Directive 2000/53/EC Compliant

Halogen Free*

HF

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

Environmental Specifications:

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

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