

ITV Devices SMT Battery Protection Device

PRODUCT: ITV5432L4030

DOCUMENT: SCD29529 REV LETTER: A

REV DATE: MARCH 7, 2020

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Specification Status: Released

TABLE I. Electrical Rating:

Current	100% x I _{rated}					
Capacity	No Melting					
Cut Time	200% x I _{rated}					
	< 1 min					
Interrupting	100A, power on 5 ms, power off 995 ms, 10000 cycles					
Current	No Melting					
Over Voltage	In apparation valtage range, the fusing time is 14 min					
Operation	In operation voltage range, the fusing time is <1min.					

Device Circuit:

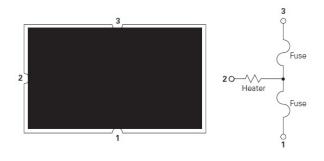


TABLE II. DIMENSIONS (mm):

Α	5.40 ± 0.2
В	3.20 ± 0.3
С	1.80 max
A1	0.72 ± 0.1
A2	0.81 ± 0.1
А3	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:

Port Number	Marking	I _{rated} (A)	Cells in series	V _{max} (V _{DC})	I _{break} (A)	V _{OP} (V)	Resistance		Agency Approval	
Part Number							$R_{heater} \ (\Omega)$	R_{fuse} (m Ω)	c 71. 'us	TÜVRheinland
ITV5432L4030	LF4030	30	9~10	62	80	34.2 ~ 46.9	64.0 ~ 87.0	0.5 ~ 2.5	Pending	Pending

Notes

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

 $\ensuremath{I_{\text{break}}}\xspace$. 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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Materials Information:

ROHS Compliant

Directive 2011/65/EU

Compliant

ELV Compliant

Halogen Free*





Environmental Specifications:

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

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