

# **ITV Devices**

**SMT Battery Protection Device** 

### PRODUCT: ITV9550L2030

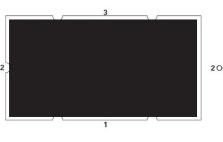
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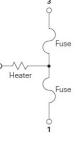
# **Specification Status: Released**

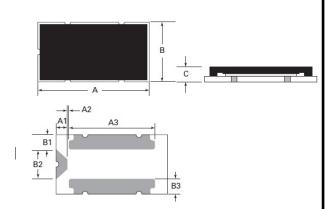
## TABLE I. Electrical Rating:

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

## **Device Circuit:**







### TABLE II. DIMENSIONS (mm):

А	9.50 ± 0.2				
В	$5.00 \pm 0.3$				
С	2.00 max				
A1	0.89 ± 0.1				
A2	0.15 ± 0.1				
A3	$7.32 \pm 0.1$				
B1	1.32 ± 0.1				
B2	2.36 ± 0.1				
B3	1.25 ± 0.1				

## **TABLE III. Electrical Specification:**

Dort Number	Morking	Irated	Cells in	Cells in	V <sub>max</sub> I <sub>br</sub>	Cells in V <sub>max</sub>	V <sub>max</sub> I <sub>break</sub> V	V <sub>OP</sub>	Resistance		Agency Approval	
Part Number	Marking	(A)	series	(V <sub>DC</sub> )	(A)	(V)	R <sub>heater</sub> (Ω)	R <sub>fuse</sub> (mΩ)	c <b>FL</b> us	TOVRheinland		
ITV9550L2030	LF2030	30	5	62	80	14.0 ~ 23.4	10.0 ~ 15.0	0.5 ~ 2.5	Pending	Pending		

#### Notes:

I<sub>rated:</sub> Current carrying capacity that is measured at 40°C thermal equilibrium condition.

I<sub>break</sub>: The current that the fuse element is able to interrupt.

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

V<sub>OP</sub>: Range of operation voltage.

 $R_{\mbox{\scriptsize heater}}$  : 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 6mm\*2oz copper traces, AWG10 covered wire, and 0.6mm glass epoxy PCB.



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Halogen Free\*

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### **Materials Information:**

#### **ROHS Compliant**

ELV Compliant





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

## **Environmental Specifications:**

Storage Temperature	nperature 0~35⁰C, ≦ 70%RH					
	3 months after shipment					
Operating Temperature	-10°C to +65°C					
Het Dessive Aging	100±5°C, 250 hours					
Hot Passive Aging	No structural damage and functional failure					
Humidity Aging	60ºC±2ºC, 90~95%R.H. 250 hours					
Humidity Aging	No structural damage and functional failure					
Cold Passive Aging	-20±3ºC, 500 hours					
Cold Passive Aging	No structural damage and functional failure					
	MIL-STD-202 Method 107G					
Thermal Shock	+125ºC /-55ºC, 100 times					
	No structural damage and functional failure					

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