

ITV Devices

SMT Battery Protection Device

PRODUCT: ITV4030L0812

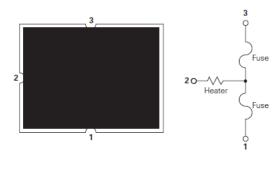
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Specification Status: Released

TABLE I. Electrical Rating:

Current	100% x I _{rated}				
Capacity	No Melting				
Cut Time	200% x I _{rated}				
	< 1 min				
Interrupting	5 x I _{rated} , power on 5 ms, power off 995 ms, 10000 cycles				
Current	No Melting				
Over Voltage	Le encention coltene reneral the fusion time in Amin				
Operation	In operation voltage range, the fusing time is <1min.				

Device Circuit:



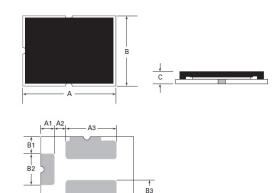


TABLE II. DIMENSIONS (mm):

А	4.00 ± 0.2				
В	3.00 ± 0.3				
С	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} (A)	Cells in series	V _{max} (V _{DC})	I _{break} (A)	V _{OP} (V)	Resistance		Agency Approval	
Part Number							R _{heater} (Ω)	R _{fuse} (mΩ)	c RL us	TÜVRheinland
ITV4030L0812	LF0812	12	2	36	50	4.0 ~ 9.0	2.0 ~ 3.2	1.5 ~ 3.5	Pending	Pending

Notes:

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

 $I_{\mbox{\scriptsize break}}$: 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.



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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	0~35⁰C, ≦ 70%RH				
	3 months after shipment				
Operating Temperature	-10°C to +65°C				
	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	+125°C /-55°C, 100 times				
	No structural damage and functional failure				

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