

ITV Devices

SMT Battery Protection Device

PRODUCT: ITV9550L5045

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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	150A, power on 5 ms, power off 995 ms, 10000 cycles			
Current	No Melting			
Over Voltage	In energian values 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 ± 0.3
С	2.00 max
A1	0.89 ± 0.1
A2	0.15 ± 0.1
A3	7.32 ± 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	V _{max}	I _{break}	V _{OP}	Resista	ance	Agency Approval	
Part Number	Marking	(A)	series	(V _{DC})	(A)	(V)	R _{heater} (Ω)	R _{fuse} (mΩ)	c FL us	TOVRheinland
ITV9550L5045	LF5045	45	12 ~ 14	62	120	43.7 ~ 62.0	38.5 ~ 68.0	0.4 ~ 2.0	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.

 $R_{\mbox{\scriptsize heater}}$. 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 25mm*2oz copper traces, AWG8 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	Temperature 0~35°C, ≦ 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	+125ºC /-55ºC, 100 times					
	No structural damage and functional failure					

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