



Shenzhen Li-ion Battery Bodyguard Technology Co.,LTD

PCM Specifications For 14.8V (4S) Li-ion/Li-Polymer Battery Packs

Model: LWS-4S5A-390V1(4S)

No.	Test Item (At 25°C)		Criterion
	Communication Protocol	I2C or SMBus (BQ40Z50)	smbc=SDA/smbd
1	Voltage	Charging voltage	DC:16.8V CC/CV (4.2V/Cell)
2	Capacity	Capacity of battery pack	3.2Ah
		Maximal capacity of battery pack	3.2Ah
3	Balance	Balance voltage for single cell	/
		Balance current for single cell	/
4	Current	Current consumption (software)	<400uA
		Current consumption (sleep)	<150uA
		Maximal continuous charging current	5A
		Maximal continuous Discharging current	5A
5	Over charge protection	Over charge detection voltage for single cell	4.25V±0.025V
		Over charge detection delay time	1S
		Over charge release voltage for single cell	4.15V±0.05V
		Over charge release delay time	2S
6	Over discharge protection	Over discharge detection voltage for single cell	2.7V±0.1V
		Over discharge detection delay time	1S
		Over discharge release voltage for single cell	3.00V±0.05V
7	Over current protection (1st Protection)	Charge over current detection current	8A
		Charge over current detection delay time	2S
		Discharge over current detection current	8A
		Discharge over current detection delay time	2S
8	Over current protection (2nd Protection)	Charge over current detection current	10A
		Charge over current detection delay time	1S
		Discharge over current detection current	10 A
		Discharge over current detection delay time	1S
9	Over current protection (3rd Protection)	Discharge over current detection current	20A±0.5A
		Discharge over current detection delay time	5-15mS
		Discharge over current release current	200mA
10	Short protection	Detection condition	P+,P- short circuit
		Detection delay time	200-500us
		Release condition	Cut load
11	Resistance	Protection circuitry	≤20mΩ
12	Temperature ptotection	Charge high temperature protection	55°C±5°C
		Charge high temperature delay time	4S
		Charge high temperature protection recovery	45°C±5°C
		Discharge high temperature protection	70°C±5°C
		Discharge high temperature protection delay time	4S

		Discharge high temperature protection recovery	60℃±5℃
13	Temperature	Operating Temperature Range	-20~+85℃
		Storage Temperature Range	-20~+125℃
14	Dimension	50*16*2.5mm	

