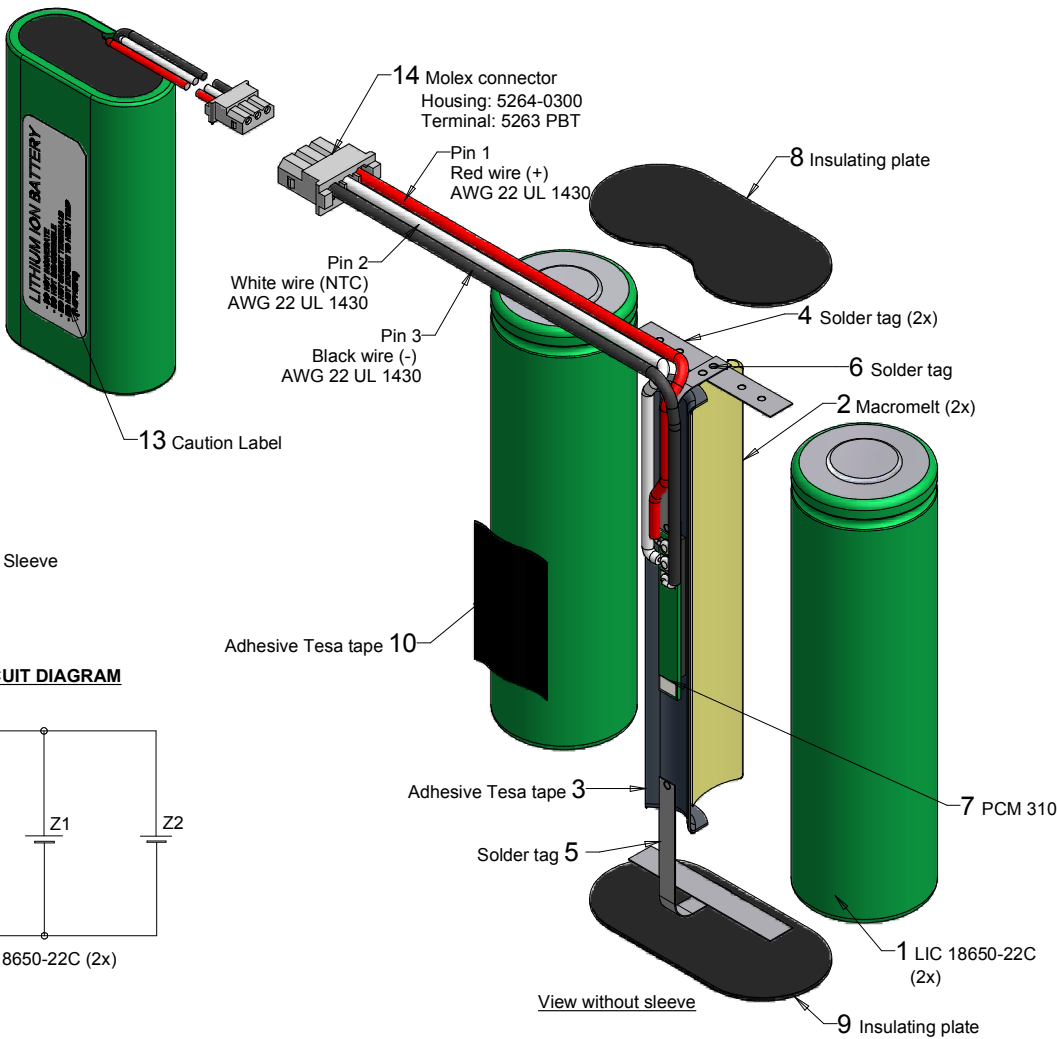
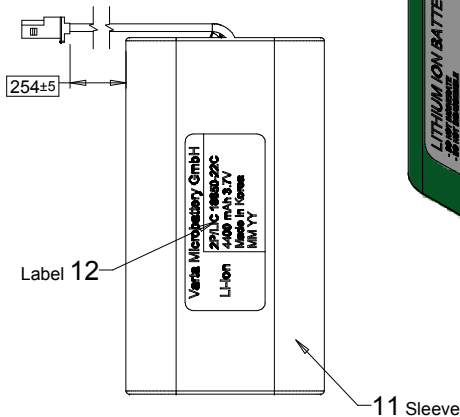
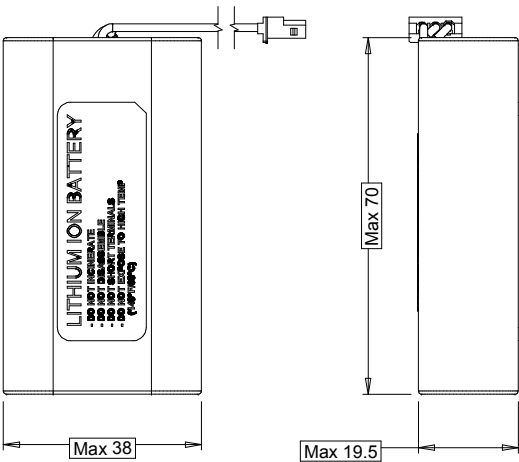
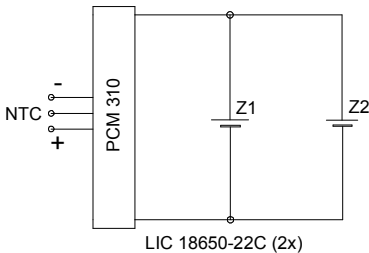


This is a controlled document.
Hardcopy to be endorsed by authorized person.
Check with Issuing Office or SAP system for latest update.



CIRCUIT DIAGRAM



1. GENERAL
Li-Ion Battery Pack in shrink sleeve incl. safety circuit, wires and connector
Weight: appr. 100g
Cell: LIC 18650-22C
PCM: PCM 310
PLH 1648-C11
NTC: 10kΩ/ 'B' value 3435
ID:None
Configuration: 2P
2 Electrical Specification
Rated Capacity: 4200mAh min, 4400mAh typical
Nominal Voltage: 3.7V
Max. Operating Voltage Range: 2.75V to 4.2V
Max. Continuous Charge Current: 1800mA (limited by PCM)
Max. Continuous Discharge Current: 1800mA (limited by PCM)
Internal Resistance: AC (1kHz) approx. 240mΩ
Exp. Cycle Life:>500 cycles> 60% of initial cap. (0.5C/0.5C)

Cell Protection:
Overcharge Detection: 4.300V ± 0.020V (0.8 to 1.2sec. delay, resume 4.100V ± 0.030V)
Overdischarge Detection: 2.400V ± 0.035V (75 to 120msec. delay, resume 2.400V ± 0.035V)
Overcurrent Detection: 3.5A to 5.5A (9.6 to 14.4msec. delay)
3. Ambient Conditions
Temperature Range
- Charge: 0 to +45°C
- Discharge: -20 to +60°C
- Storage: 1 year at -20 to 20°C
3 month at -20 to 45°C
1 month at -20 to 60°C
Humidity: 65 ± 20%RH
4. Safety
Please follow Li-Ion Handling and Safety Precautions

These dimensions are considered inspectable

- Battery visible surface to be free from scratches, marks and foreign substances
- Production code printed according to MMY

1	P050/07	Update PCM designation PLH 1648-C11 was PLH 1648-C4	2007-06-26	Didit
0	L007/06	Refer to preliminary drawing # P60-10076 rev.000	2006-02-01	Didit
No	AO No	Revisions	2	Date Name
Customer: <i>Tigershark</i>		Material: Refer to part list #693883		Description: 2P/LIC 18650-22C PCM S WC with PCM, sleeve and wire connector
Projection:		Dimensions in mm		Dwg. No: 693883
Tolerance: ISO 2768-m		Prepared & Checked	Verified & Approved	VKB Order No: 56620 502 023
Scale: 1 : 1 in A3		2006-02-01	Didit	4 0 1

Rights reserved to make technical changes, as a result of further development, without notice. This drawing is the property of VARTA Microbattery and must not be copied or disclosed to a third party without the written consent of VARTA Microbattery.