

| REVISION HISTORY |                                                                     |       |       |            |          |
|------------------|---------------------------------------------------------------------|-------|-------|------------|----------|
| REV              | DESCRIPTION                                                         | SALES | RFS   | DATE       | APPROVED |
| A                | INITIAL RELEASE                                                     | SV    | 26685 | 3/10/2017  | QA       |
| B                | REMOVE BACK LABEL FROM PAGE 7                                       | SV    | 26992 | 1/11/2018  | DR       |
| C                | UPDATE LABEL TO INCLUDE "WHITE WIRE:NTC"                            | SV    | 27190 | 10/16/2018 | DR       |
| D                | Change White NTC wire to Yellow, add a date code to the label: YYMM | NF    | 27588 | 12/21/2020 | DR       |
|                  |                                                                     |       |       |            |          |
|                  |                                                                     |       |       |            |          |
|                  |                                                                     |       |       |            |          |
|                  |                                                                     |       |       |            |          |
|                  |                                                                     |       |       |            |          |

See Page 2 for important battery warranty and usage information.

**RELEASED**  
*By pudxc at 9:59 am, Dec 22, 2020*

Foot Note:  
Globtek Inc. will not be liable for the safety and performance of these power supplies if unauthorized access and repair occurs. End user should consult applicable UL, CSA or EN standards for proper installation instruction.  
Limitation of Use:  
Globtek product are not authorized for use as mission critical components in life support hazardous environment, nuclear or aircraft applications without prior written approval from the CEO of Globtek Inc.  
Contents of this document are subject to change without prior notice

PROPRIETARY INFORMATION:

PROPRIETARY OF GLOBTEK, INC. ANY REPRODUCTION, DISCLOSURE OR USE OF THIS DRAWING, IN WHOLE OR IN PART, IS HEREBY PROHIBITED EXCEPT AS SPECIFIED IN WRITING BY GLOBTEK, INC.

By customer signing or accepting this document, they agree to acknowledge and accept the

**Guidelines and cautions, Safety Notes, and Safety Precautions published on GlobTek's website**

[http://en.globtek.com/safety-cautions.php#.UUD-NRzU\\_I8](http://en.globtek.com/safety-cautions.php#.UUD-NRzU_I8)

GlobTek offers a 5-year warranty on workmanship and electrical components assembly on all new battery pack products excluding the battery cells themselves which are covered by the Manufacturer's original warranty at their published warranty period. Please refer to the manufacturer's manufacturer's warranty policy for cells. For GlobTek brand cells, GlobTek provides a 12-month warranty for Li-Ion batteries. The warranty period is based upon the expectation that the battery will deliver 80% of its initial capacity after 300 cycles at low to moderate power loads. High power loads may cause a battery to reach 80% of initial capacity in less than the 12-month warranty period. Li-Ion batteries will continue to operate below the 80% capacity threshold; however, the capacity (run time) delivered between charges will continue to decrease.

The purchaser of this product (Customer) agrees that it is their sole responsibility to determine suitability of the product described for their application and to take precautions for protection against any hazards attendant to the handling and use of the product. Products sold are not returnable. GlobTek, Inc. will produce or provide its products to our published specifications. The purchaser of this product (Customer) shall be solely responsible for determining the products' fitness for use in their applications.

**Customer Approval of Specification:**

Please approve, sign and send back to GlobTek so we can complete order processing.

A delay in receipt of this form will delay delivery schedule.

Company Name:

Customer P/N:

Quote Number:

Date:

Authorized Representative Name:

Authorized Representative Signature:

 GlobTek®, Inc.

[www.globtek.com](http://www.globtek.com)

186 Veterans Drive, Northvale, NJ 07467

Tel. 201-784-1000 Fax 201-784-0111

Drawing Title: Li-Ion Polymer Battery Pack

3.7 VOLTS @ 700mAh

MODEL NO: GP503048

PART NO: BL0700F5030481S1PCTC

REV. D

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**1.GENERAL SPECIFICATION:****LITHIUM-ION POLYMER BATTERY PACK**

CELL: GP503048

PCM: GLOBTEK STANDARD

NTC: 10K

ID: N/A

CONFIGURATION: 1S1P

WEIGHT: APROX 22.0 g

**2.ELECTRICAL SPECIFICATION:**

NOMINAL CAPACITY: 700 mAh

NOMINAL VOLTAGE: 3.7

WATT-HOUR RATING: 2.59WH

CHARGING METHOD: CONSTANT CURRENT TO 4.20V + CONSTANT VOLTAGE 4.2V TO 0.01C CUT-OFF

MAX. CHARGE VOLTAGE [V]: 4.20 (±50mV)

CHARGE CURRENT: 0.2C STANDARD; 1.0C MAXIMUM

REC. CHARGE CUT OFF: BY CURRENT 50mA OR TIMER 4H

DISCHARGE CURRENT: 0.2C STANDARD; 1.0C MAXIMUM CONTINUOUS

REC. DISCHARGE CUT OFF: 3V

INTERNAL IMPEDANCE: ≤220 mΩ (new cell)

EXP. CYCLE LIFE: &gt;500 CYCLES &gt; 70% OF INITIAL CAPACITY (0.5C CHARGE / 0.5C DISCHARGE)

&gt;300 CYCLES, &gt;80% OF INITIAL CAPACITY (0.5C CHARGE / 0.5C DISCHARGE)

**CELL PROTECTION:**

OVER CHARGE DETECTION: 4.25 ± 0.025V

(0.9 TO 1.4 SEC. DELAY, RESUME 4.08 ± 0.025V)

OVER DISCHARGE DETECTION: 3.0 ± 0.05V

(115 to 173msec. DELAY, RELEASE 3.20 ± 0.08V; RECHARGE TO BEGIN CHARGING AGAIN)

OVER CURRENT DETECTION: 1.0A to 4.0A (7.2 to 11.0 msec. DELAY; CUT LOAD TO RELEASE)

**3. AMBIENT CONDITIONS****TEMPERATURE RANGE:**

CHARGE: 0 TO +45°C

DISCHARGE: -20 TO +60°C

CHARGE RETENTION/STORAGE [%]: 1 YEAR AT -20 TO +20°C &gt;80%

3 MONTHS AT -20 TO +45°C &gt;80%

1 MONTH AT -20 To +60°C &gt;80%

HUMIDITY: 60 ± 25%RH

**4.ENVIORMENTAL AND SAFETY**

PLEASE FOLLOW GlobTek, Inc. HANDLING AND SAFETY PRECAUTIONS FOR Lilon &amp; LiPolymer.

**5. CELL REGULATORY APPROVALS:**

UL: UL 1642; MH48131

**5 BATTERY PACK APPROVALS:**

RoHS: COMPLIES WITH EU 2002/95/EC AND CHINA SJ/T 11363-2006

CE Mark: COMPLIES WITH 2004/108/EC ELECTROMAGNETIC COMPATIBILITY INCLUDING BUT NOT LIMITED TO  
EN61000-6-1:2007, EN61000-6-3:2007

TRANSPORTATION: PACK DESIGNED TO MEET un38.3, UL 2054, IEC 62133

UL: Design to meet UL2054 IEC62133



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Tel. 201-784-1000 Fax 201-784-0111

Drawing Title: Li-Ion Polymer Battery Pack

3.7 VOLTS @ 700mAh

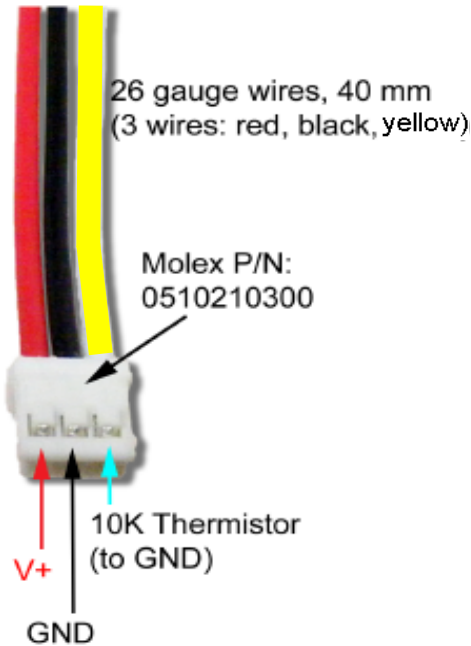
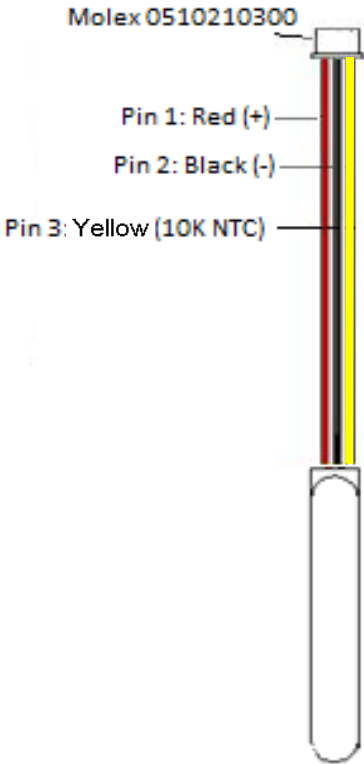
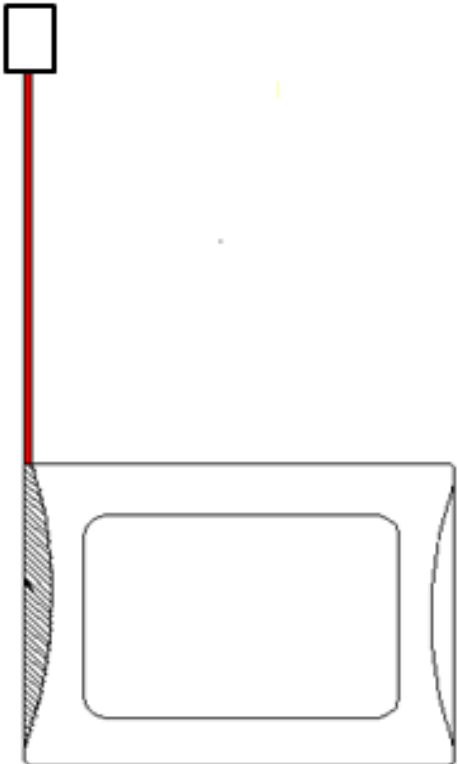
MODEL NO: GP503048

PART NO: BL0750F5030481S1PCTC

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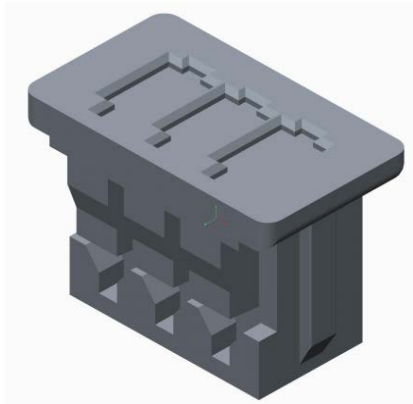
6. MECHANICAL:

|                          |                                   |
|--------------------------|-----------------------------------|
| DIMENSIONS:              | 50.5 x 30.5 (±.5) x 5.3 (±0.3) mm |
| SHRINK WRAP:             | BLUE PVC                          |
| WIRE TYPE:               | UL1007, 26AWG                     |
| WIRE LENGTH:             | 40.0 mm +5.0 /-0.0mm              |
| WIRE POLARITY:           | PIN 1: RED POSITIVE (+)           |
| WIRE POLARITY:           | PIN 2: BLACK NEGATIVE (-)         |
| WIRE POLARITY:           | PIN 3: 10K THERMISTOR             |
| TIN LENGTH:              | N/A                               |
| ADDITIONAL REQUIREMENTS: | N/A                               |



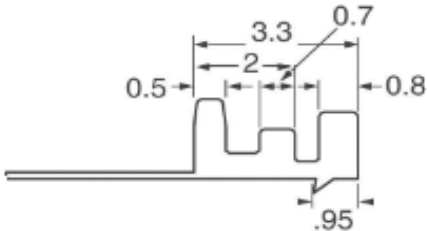
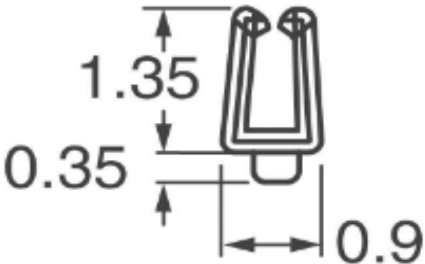
[ADDITIONAL OUTPUT PLUG OPTIONS ARE AVAILABLE BY CLICKING THIS LINK.](#)  
[STANDARD PLUGS AND CONNECTORS CAN BE SEEN ONLINE BY CLICKING THIS LINK](#)

7. OUTPUT CONNECTOR:  
ACTUAL CONNECTOR'S, OVERMOLDS, MAY VARY SLIGHTLY FROM THE PICTURE BELOW



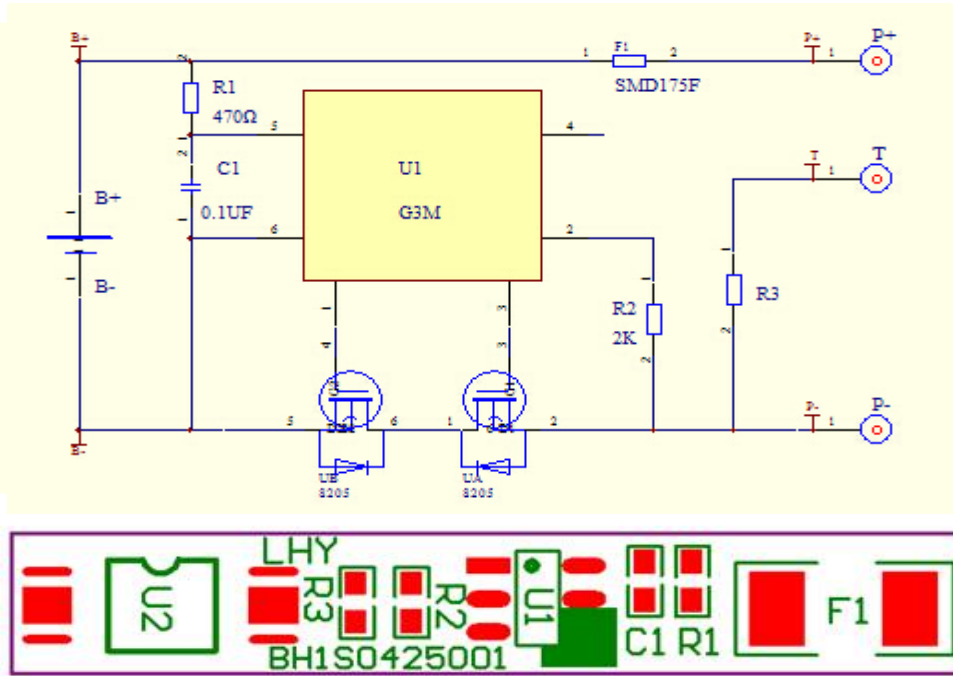
| EQUIVALENT              |  | Y / N |                           |
|-------------------------|--|-------|---------------------------|
| PLUG HOUSING TYPE       |  | Y     | Molex 0510210300          |
| PLUG TERMINALS          |  | Y     | Molex 0500798000          |
| PLUG DIMENSIONS         |  |       | See drawing below         |
| POLARITY                |  |       | PIN 1: RED POSITIVE(+)    |
| POLARITY                |  |       | PIN 2: BLACK NEGATIVE (-) |
| POLARITY                |  |       | PIN 3: YELLOW 10K NTC     |
| ADDITIONAL REQUIREMENTS |  |       |                           |

[ADDITIONAL OUTPUT PLUG OPTIONS ARE AVAILABLE BY CLICKING THIS LINK.](#)  
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Battery Protection Module

| NO. | Location | Part name             | Specification                                   | Pack type | Qty |
|-----|----------|-----------------------|-------------------------------------------------|-----------|-----|
| 1   | U1       | Battery protection IC | G3J                                             | SOT-23-6  | 1   |
| 2   | U2       | Silicon MOSFET        | A8820                                           | TSSOP-8   | 1   |
| 3   | R1       | Resistance            | SMD 470Ω±5%                                     | 0402      | 1   |
| 4   | R2       | Resistance            | SMD 2K±5%                                       | 0402      | 1   |
| 5   | R3       | Resistance            | SMD 10KNTC±5%                                   | 0402      | 1   |
| 6   | C1       | Capacitance           | SMD 0.1μF                                       | 0402      | 1   |
| 7   | F1       | PTC                   | SMD175F                                         | 1210      | 1   |
| 8   | PCB      | Print circuit board   | LHY-<br>BH1S0425001 (25±0.15)*(4±0.1)*(0.6±0.1) |           | 1   |



8. LABEL:

|                          |       |
|--------------------------|-------|
| MATERIAL:                | TBD   |
| BACKGROUND COLOR:        | WHITE |
| TEXT COLOR:              | BLACK |
| LABEL WIDTH: (mm)        | 32mm  |
| LABEL HEIGHT: (mm)       | 20mm  |
| ADDITIONAL REQUIREMENTS: | N/A   |



9. PACKAGING:

|                      |     |
|----------------------|-----|
| PE BAG SIZE          | TBD |
| CARTON SIZE:         | TBD |
| QUANTITY PER CARTON: | TBD |
| G.W.                 | TBD |
|                      |     |
|                      |     |

