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.

/ICION	HISTORY

	REVISION HISTORY				
REV	DESCRIPTION	SALES	RFS	DATE	APPROVED
Α	Initial Release	BS	25754	12/23/14	HM
В	Correct battery type from prismatic to polymer, update cell protection specifications, update drawing, add staggered lead lengths	BS	25839	3/17/2015	HM
	and strip/tin specifications				
С	Add (Recommended 4.1V/cell) to Max. Charging Voltage, change capacity rating to 1050mAh (typical), change Watt-Hour Rating	SV	27497	1/29/2020	DR
	to 3.89WH, update label to show Li-lon 3.7V 1050mAh 3.89Wh, add IEC Designation Code to Model No.				
D	Update wire termination to 100mm±1mm	SV	27500	2/4/2020	DR
D1	Add packaging info, Format update	DR	27544	7/5/2020	DR
Е	Update NTC wire to Yellow color	DR	27565	8/7/2020	DR
F	Update capacity from 1050 mAh to 1200 mAh, Watt-hours rating to 4.44Whm, add note on page 4	DR	27578	10/30/2020	DR
F1	Update CELL REGULATORY APPROVALS to Design to meet UL1642, IEC62133	DR	27842	4/1/2024	DR

See Page 2 for important battery warranty and usage information.

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

© GlobTek; Inc. Drawing Title: Li-Ion Polymer Battery with Protection Circuit			
www.globtek.com	3.7 Volts @ 1200mAh		
186 Veterans Drive, Northvale, NJ 07467	Model No.: GP404852 (1ICP4/45/47)		
Tel. 201-784-1000 Fax 201-784-0111	Part No.: BL1200P4054481S1PCAC		Rev. F1

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_18

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-lon 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-lon 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 GlobTek battery pack products (Customer) agrees that they are a "Sophisticated user" who understands battery technology and 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. GlobTek products are only designed for professional use and integration by companies into their products and may not be used by consumers directly. GlobTek provides batteries and battery packs as a component of an end system.

The acceptance of GlobTek specifications, the information on this page and use of the product(s) described in this or other GlobTek documents indicate that the product was qualified for use (tested and/or sample waiver signed), and the acceptance and binding of the customer to GlobTek terms and conditions, which supersede all other agreements, terms and conditions http://en.globtek.com/terms-and-conditions/

Lithium ion batteries are inherently dangerous, Continuous usage or charging without allowing the battery to discharge is a hazard. FIRE HAZARD: This like all Li-Ion battery packs must be regularly discharged and charged. it is not recommended to be kept on permanent full charge and in a full state of charge.

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:

ľ	€ GlobTek, Inc.	Drawing Title: Li-Ion Polymer Battery with Protection Circuit	
	www.globtek.com	3.7 Volts @ 1200mAh	
	186 Veterans Drive, Northvale, NJ 07467	Model No.: GP404852 (1ICP4/45/47)	
	Tel. 201-784-1000 Fax 201-784-0111	Part No: BL1200P4054481S1PCAC	Rev. F1

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.

1.GENERAL SPECIFICATION:

Battery with	safety	circuit:
--------------	--------	----------

CELL:	GlobTek GP404852	
PCM:	G3J/8205A	
NTC:	10K	
ID:	N/A	
CONFIGURATION:	1S1P	
WEIGHT:	Approximately 30grams	
2 EL ECTRICAL SPECIFICATION:		





2.ELECTRICAL SPECIFICATION:

RATED CAPACITY:	1200mAh typical with 0.2C discharge
NOMINAL VOLTAGE:	3.7 V
WATT-HOUR RATING:	4.44Wh
CHARGING METHOD:	CONSTANT CURRENT + CONSTANT VOLTAGE
MAXIMUM CHARGE VOLTAGE [V]:	4.2 (±30mV) (Recommended 4.1V/cell)
CHARGE CURRENT:	0.5C (standard); 1.0C (maximum)
RECOMMENDED CHARGE CUT OFF:	By current 0.01C
MAX. CONTINUOUS DISCHARGE CURREN	T:1.0C
DISCHARGE CUT OFF VOLTAGE:	3.0V
INTERNAL IMPEDANCE (NEW CELL):	≤180 mΩ
EXPECTED CYCLE LIFE:	≥300 Cycles (0.2C discharge to 3.0V, 0.2C constant current charge to 4.2V) >80% of initial capacity

CELL PROTECTION:

OVER CHARGE VOLTAGE DETECTION:	4.28 ± 0.025V	
	(0.96 to 1.4 sec. delay, resume 4.08 ± 0.025\	

OVER DISCHARGE VOLTAGE DETECTION: 3.0 ± 0.05 V (115 to 173 msec. delay)

OVER CURRENT DETECTION:	1.5A to 3.5A (7.2 to 11 msec.	delay), remove load to recover

3. AMBIENT CONDITIONS

TEMPERATURE RANGE:	

CHARGE:	0 to +45°C
DISCHARGE:	-20 to +55°C
CHARGE RETENTION/STORAGE [%]:	within 1 year -20 to +20°C >80%
	within 3 months -20 TO +45°C >80%

HUMIDITY: $60 \pm 25\%$	₀KH
-------------------------	-----

4.ENVIORMENTAL AND SAFETY

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

5. CELL REGULATORY APPROVALS:

UL:	Design to meet UL1642, IEC62133

6. BATTERY PACK APPROVALS:

O. DATTERT LACK ALL ROYALS.	
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:	Approved UN38.3 5th Edition
UL	Approved to IEC62133:2012

GlobTek, Inc.
www.globtek.com
186 Veterans Drive, Northvale, NJ 07467
Tel. 201-784-1000 Fax 201-784-0111

Drawing Title: Li-Ion Polymer Battery with Protection Circuit
3.7 Volts @ 1200mAh

0 10.10 0	
Model No.: GP404852	(1ICP4/45/47)

Part No.:	BL12	200P405	44815	S1PCAC

Rev. F1

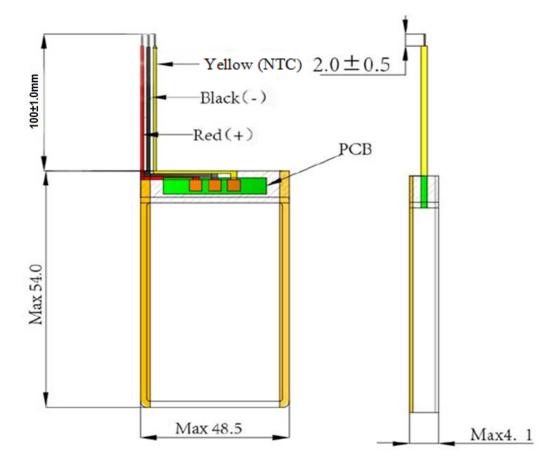
PROPRIETARY OF GLOBTEK, INC. ANY REPRODUCTION, DISCLOSURE OR USE OF THIS DRAWING, IN WHOLE OR IN PART, IS HEREBY PROHIBITED EXCEPT AS SPECIFIED IN WRITING BY GLOBTEK, INC.

7. MECHANICAL:

DIMENSIONS:	
Length	53.0 +/- 1.0mm
Width	48.0 +/- 0.5mm
Thickness	4.0 +/- 0.1mm
SHRINK WRAP:	N/A
WIRE TYPE:	UL1571, 28AWG
WIRE LENGTH:	100mm +/- 1.0mm
RED	Positive (+)
BLACK	Negative (-)
YELLOW	10K NTC
STRIP LENGTH:	As required



Stripped and tinned conductor ends will be covered with tape to avoid accidental shorting during handling and transit.



Note: Max expansion rate of the cell after 500 cycles - 8%

ADDITIONAL OUTPUT PLUG OPTIONS ARE AVAILABLE BY CLICKING THIS LINK.

STANDARD PLUGS AND CONNECTORS CAN BE SEEN ONLINE BY CLICKING THIS LINK

GlobTek [®] , Inc.	Drawing Title: Li-Ion Polymer Battery with Protection Circuit	
www.globtek.com	3.7 Volts @ 1200mAh	
186 Veterans Drive, Northvale, NJ 07467	Model No.: GP404852 (1ICP4/45/47)	
Tel. 201-784-1000 Fax 201-784-0111	Part No.: BL1200P4054481S1PCAC	Rev. F1

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.

8. LABEL:

MATERIAL:	TBD
BACKGROUND COLOR:	N/A
TEXT COLOR:	BLACK
LABEL WIDTH: (mm)	TBD
LABEL HEIGHT: (mm)	TBD
ADDITIONAL REQUIREMENTS:	N/A



Li-ion 3.7V 1200mAh 4.44Wh

CAUTION:

- May explode if disposed of in fire.
- Use specified charger only.
- · Do not short circuit.

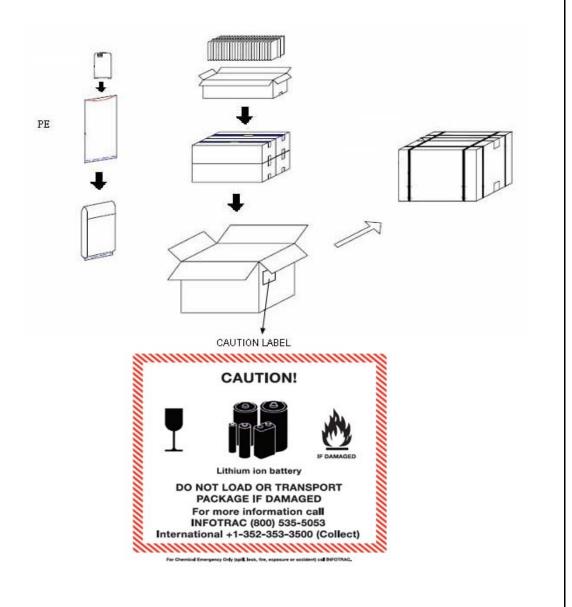
YYYYMM MADE IN CHINA

€ GlobTek, Inc.	Drawing Title: Li-Ion Polymer Battery with Protection Circuit	Drawing Title: Li-Ion Polymer Battery with Protection Circuit	
www.globtek.com	3.7 Volts @ 1200mAh		
186 Veterans Drive, Northvale, NJ 07467	Model No.: GP404852 (1ICP4/45/47)		
Tel. 201-784-1000 Fax 201-784-0111	Part No.: BL1200P4054481S1PCAC	Rev. F1	

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.

9. PACKAGING:

PE BAG SIZE	120*80 mm
GIFT BOX SIZE:	60*45*15 mm
CARTON SIZE:	335*260*225 mm
QUANTITY PER CARTON:	340
G.W.	TBD



€ GlobTek, Inc.	Drawing Title: Li-Ion Polymer Battery with Protection Circuit	
www.globtek.com	3.7 Volts @ 1200mAh	
186 Veterans Drive, Northvale, NJ 07467	Model No.: GP404852 (1ICP4/45/47)	
Tel. 201-784-1000 Fax 201-784-0111	Part No.: BL1200P4054481S1PCAC	Rev. F1