

Lithium-polymer

rechargeable battery (accumulator)

486150100602

Electrical characteristics

Parameter	Condition	T _A	Min	Typ	Max	Unit
Un Nominal voltage		25°		3,7		V
Qn Nominal capacity	discharge 0,2 x I _{dmax}	25°	700	750		mAh
Ri Impedance	f _{mess} = 1kHz	25°			180	mΩ
Ucp Over charge protection voltage		25°	4,22	4,25	4,28	V
Ic Charge current	U < Ucp	25°		150	750	mA
Udc Discharge cut-off voltage		25°			3,0	V
Udp Over discharge protection voltage		25°	2,4	2,5	2,6	V
Id Discharge current		25°		150	750 (Peak 3000)	mA

Performance characteristics

Parameter	Condition	T _A	Min	Typ	Max	Unit
tdc Charge time	0,2 x I _{cmax}	25°		6	7	h
	I _{cmax}			3	4	
n Load life cycles (Q _n ≥ 80%)	charge 0,2 x I _{cmax} to Ucp	25°	300			cyl.
	discharge 0,2 x I _{dmax} to Udc					
Capacity variation	discharge 0,2 x I _{dmax} to Udc	-20°C	50			%
		25°C		100		
		55°C	85			
Self discharge	after 28 days	25°C			10	%

Physical characteristics

Parameter	Condition	T _A	Min	Typ	Max	Unit
9o Operating temperature	charging		0		40	°C
	discharging		-20		60	
9s Storage temperature	< 1 month		-20		60	°C
	< 3 month		-20		45	
	< 1 year		-20		20	
φs Storage humidity		0..25°C	35		85	%
m Weight			18	20	22	g

Mechanical characteristics

Parameter	Condition	Tol.	Min	Typ	Max	Unit
Length		+0,4 -0,4		91		mm
Height				6		mm
Width		+0,6 -0,2		22		mm
Cable length	without connector	+0,5 -0,5		17,5		mm

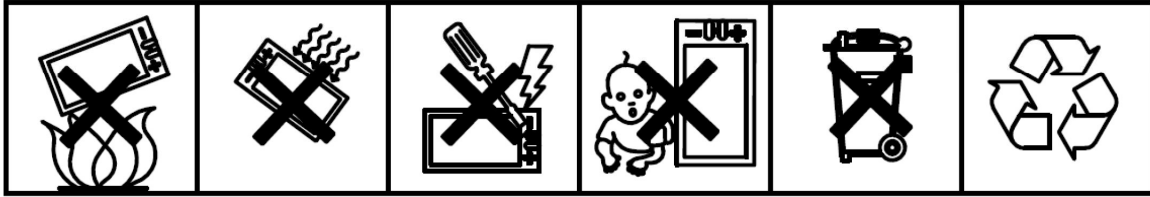
Chemical characteristics

Component	Material
Chasis	ABS or PC, black (UL94 V-0)

Connector characteristics

Component	Type	Condition	Parts
Cable	AWG28	Pin1: (+) red	1
		Pin2: (-) black	1
Housing	Molex	87439-0200	1
Terminal	Molex	87421-0000	2

Warning label



Legal requirements

- RoHS 2011/65/EU Restriction of Hazardous Substances
- REACH (EG) Nr. 1907/2006 Declaration of e.g.: 1,2-Dimethoxyethan, 1,3-Propansulton
- DIN EN 62133-2:2015-02 ➔ CB report
- IATA Lithium Battery Guidance Document – 2016 V2

Expected documentation

- UN 3480 Dangerous goods indicator, Lithium Ionen Battery
- CB report ➔ DIN EN 62133
- UN38.3 Report Lithium Battery Test Report
- 1.2M Report Lithium Drop Test Report
- MSDS Report Material Safty Data Sheet

Expected battery delivery charge state

- Limited to a maximum of $0,3 \times Q_n$

Expected protection

- Over charge
- Over discharge
- Short protection