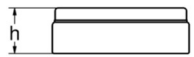
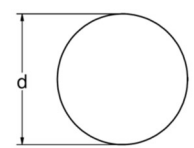



Preliminary Data Sheet – CP1240 A4X (CoinPower®)¹

	Type Designation	CP1240 A4X
	Type Number	63124
	VKB Number	63124 201 512
	Cell Code	INR1240
	System	Graphite – layered metal oxide (LiNi _x Mn _y Co _z O ₂)
	UL Recognition	MH13654
	Nominal Voltage [V]	3.7 (average)
	Typical Capacity [mAh]	51 (at 0.1C from 4.3 V to 3.0 V at RT)
	Nominal Capacity [mAh]	50 (at 0.2C from 4.3 V to 3.0 V at RT)
	Rated Capacity C [mAh]	49 (at 0.2C from 4.3 V to 3.0 V at RT)
	Dimensions [mm] (without Tags)	
	Diameter	12.1 +0.1/-0.3
	Height	4.0 +0.1/-0.1
	Weight. approx [g]	1.3 +0.2/-0.2
	Charging Method	Constant Current + Constant Voltage
	Charge Voltage [V]	4.30 ± 0.05
	Initial Charge Current [mA]	Standard Charge ² : 25 Fast Charge ² : 50 Rapid Charge ³ : 100
	Charging Cut-Off (a) or (b)	
	a) by time [h]	Standard Charge: 3.5 Fast/Rapid Charge: 2
	b) by min current [mA]	1.1
	Discharge Cut-Off Voltage [V]	3.0
	Max. Pulse Discharge Current [mA]	156 @ 2s
	Max. Continuous Discharge Current [mA]	106
	Operating Temperature [°C]	Charge: 0 to 45 Discharge: -20 to 60
	Cell Surface Temperature [°C]	60
	Storage Temperature	1 Year at -20 to 20 °C > 90
	Capacity Recovery Rate⁴ [%]	3 Month at -20 to 45 °C > 90 1 Month at -20 to 60 °C > 85
	Impedance Initial [Ω]	< 0.6 @ 1kHz
	Cycle Life 0.5C/0.5C, 20 °C⁵ [Cycles]	>500 (> 80% of C _{ini})
	Safety	UN 38.3 passed relevant tests acc. IEC 62133 pending
	Internal Approval	
	Overcharge Test (4.8V, 3C, 12h)	passed

¹ Recommendations regarding Charging/Discharging and Safety (cf. Handling Precautions/Advanced Product Information) have to be accepted. Cell must not be used without external safety electronics (PCM – Protection Circuit Module)! The CoinPower cell may exclusively be used for the intended purpose. For medical applications please contact VARTA Microbattery. This product is protected by patents, please see: www.varta-ag.com/patents

² "CoinPower A4-Version Charging Document" must be observed.

³ "CoinPower A4-Version Charging Document" must be observed. Max. charging voltage: 4.05V ± 0.05V; min. charging temperature: 20°C.

⁴ After storage at initial cell voltage of 3.6 to 3.7 V / cell

⁵ typical values