



# PRIMARY CELL GUIDE

*Superior Power Solutions  
For Your Critical Applications*



Electrochem is unique in that we not only produce battery packs, but we also build our own lithium primary cells using proprietary designs and electrolytes. This gives us the flexibility to design power solutions to meet your specific needs. With a diverse portfolio of cells in various sizes, temperature ranges and rate capabilities, we can design a custom battery pack that meets the unique criteria of your application, differentiating your product in the increasingly competitive global market.



## QUICK REFERENCE

### High Rate Lithium Cells

SERIES	MAX. CONT. CURRENT (mA)*	AVAILABLE CELL SIZES	TEMPERATURE RANGE	KEY FEATURES
BCX	50 to 3000	AA, 1/2 C, C, D, DD, SD, TSD	-55°C to +65°C -55°C to +85°C	High Power, Low Temp, Superior Restart
QTC	2000	DD	-40°C to +85°C	High Current, High Capacity
CSC	150 to 4000	AA, 2/5 C, 1/2 C, C, D, DD, TSD	-20°C to +93°C	High Power, High Capacity
MWD	2000	DD	0°C to +150°C	High Current, Harsh Conditions
PMX	150 to 2000	1/2 AA, AA, C, CC, DD	-20°C to +150°C -20°C to +165°C	High Power, High Temp
VHT	150 to 250	AA, C	+70°C to +200°C	High Current, Extreme Temp
HR	2000	TSD	-40°C to +150°C	High Power, High Capacity, Harsh Conditions

### Moderate Rate Lithium Cells

SERIES	MAX. CONT. CURRENT (mA)*	AVAILABLE CELL SIZES	TEMPERATURE RANGE	KEY FEATURES
MR	75 to 550	C, 3/2 C, SUB CC, CC, D, DD, TSD	-40°C to +150°C -40°C to +165°C +50°C to +180°C +70°C to +200°C	High Temp, Harsh Conditions

### Low Rate Lithium Cells

SERIES	MAX. CONT. CURRENT (mA)*	AVAILABLE CELL SIZES	TEMPERATURE RANGE	KEY FEATURES
LR	.5 to 150	Sub AAA, 1/2 AA, AA, C, 3/2 C, Sub CC, CC	-40°C to +100°C -40°C to +150°C -40°C to +165°C +50°C to +180°C +70°C to +200°C	High Capacity, Low Current
BCX	10	Coin	-55°C to +85°C	High Capacity, Small Form Factor
QTC	1 to 3	Coin	-40°C to +85°C	
CSC	10	Coin	-20°C to +93°C	

## Why Choose Electrochem?



**STABILITY:** Well known, prominent company with strong financial stability and extensive end-to-end capabilities via Integer.



**BEST-IN-CLASS:** State-of-the-art manufacturing facility with best-in-class production processes in place.



**CUSTOMIZATION:** Unusually broad range of cell types, sizes, and electrolytes with strong capability for custom cell and pack designs.



**REPUTATION:** Distinctly acclaimed for quality and reliability with decades of experience within the industries we serve.



**CONTROL:** In-house cell production allows control over the complete solution (cells as well as pack).



**REACH:** A global battery supplier with the experience and expertise needed to support customers worldwide.

# Electrochem Primary Power Solutions

## High Rate

### BCX Series

Open Circuit Voltage: 3.9V

Chemistry: Bromine Chloride



PART NUMBER	CELL SIZE	DIAMETER (mm)	LENGTH (mm)	CELL WEIGHT (g)	LITHIUM CONTENT (g)	CAPACITY (Ah)	MAX. CONT. CURRENT (mA)
3B0027	AA	13.7	49.2	15.0	0.5	1.6	50
3B0064	AA	13.7	49.3	17.0	0.5	1.9	100
3B0068	1/2 C	25.4	29.0	34.0	1.2	3.5	300
3B0070	C	25.4	48.3	52.0	2.1	7.1	500
3B3800	C	25.6	48.4	52.0	2.1	6.5	750
3B0075	D	33.5	59.4	116.0	4.4	14	1000
3B4000	D	33.5	59.3	111.2	4.6	14	1000
3B0076	DD	33.5	111.5	213.0	9.9	30	3000
3B4700*	SD	44.5	68.0	200.0	10.2	31	1000
3B6100	TSD	44.1	94.4	290.0	14.7	38	2000

\*Upper temperature limit on 3B4700 cell is 65°C

### QTC85 Series

Open Circuit Voltage: 3.67V

Chemistry: Thionyl Chloride



PART NUMBER	CELL SIZE	DIAMETER (mm)	LENGTH (mm)	CELL WEIGHT (g)	LITHIUM CONTENT (g)	CAPACITY (Ah)	MAX. CONT. CURRENT (mA)
3B2600	DD	33.5	111.5	213.0	9.9	31	2000

### CSC93 Series

Open Circuit Voltage: 3.93V

Chemistry: Sulfuryl Chloride



PART NUMBER	CELL SIZE	DIAMETER (mm)	LENGTH (mm)	CELL WEIGHT (g)	LITHIUM CONTENT (g)	CAPACITY (Ah)	MAX. CONT. CURRENT (mA)
3B0024	AA	13.7	49.3	17.0	0.6	1.8	150
3B0665	2/5 C	25.4	23.4	26.0	0.9	2.7	250
3B0029	1/2 C	25.4	29.0	34.0	1.1	3.1	350
3B0030	C	25.4	48.3	52.0	2.1	6.4	1000
3B0035	D	33.5	59.4	116.0	4.4	13	2000
3B0036	DD	33.5	111.5	213.0	9.9	26	4000
3B6200	TSD	44.2	94.5	300.0	14.7	37	2000

### MWD150 Series

Open Circuit Voltage: 3.67V

Chemistry: Thionyl Chloride



PART NUMBER	CELL SIZE	DIAMETER (mm)	LENGTH (mm)	CELL WEIGHT (g)	LITHIUM CONTENT (g)	CAPACITY (Ah)	MAX. CONT. CURRENT (mA)
3B3900	DD	32.8	127.0	210.0	7.7	22	2000

### PMX150 Series

Open Circuit Voltage: 3.93V

Chemistry: Sulfuryl Chloride



PART NUMBER	CELL SIZE	DIAMETER (mm)	LENGTH (mm)	CELL WEIGHT (g)	LITHIUM CONTENT (g)	CAPACITY (Ah)	MAX. CONT. CURRENT (mA)
3B5700	1/2 AA	13.7	30.0	8.3	0.3	0.90	150
3B1065	AA	13.7	53.1	17.0	0.3	1.7	150
3B3700	C	24.9	52.3	52.0	1.8	6.3	500
3B3000	CC	24.9	103.1	101.0	4.1	14	500
3B2800	DD	33.0	127.5	215.0	8.0	29	2000

### PMX165 Series

Open Circuit Voltage: 3.93V

Chemistry: Sulfuryl Chloride



PART NUMBER	CELL SIZE	DIAMETER (mm)	LENGTH (mm)	CELL WEIGHT (g)	LITHIUM CONTENT (g)	CAPACITY (Ah)	MAX. CONT. CURRENT (mA)
3B5100	C	24.9	52.3	52.0	1.8	6.2	500
3B5200	CC	24.9	103.1	101.0	4.1	14	500

### 150HR Series

Open Circuit Voltage: 3.67

Chemistry: Thionyl Chloride



PART NUMBER	CELL SIZE	DIAMETER (mm)	LENGTH (mm)	CELL WEIGHT (g)	LITHIUM CONTENT (g)	CAPACITY (Ah)	MAX. CONT. CURRENT (mA)
4440	TSD	48.0	84.0	320.0	12.0	38	2000

### VHT200 Series

Open Circuit Voltage: 3.67

Chemistry: Thionyl Chloride



PART NUMBER	CELL SIZE	DIAMETER (mm)	LENGTH (mm)	CELL WEIGHT (g)	LITHIUM CONTENT (g)	CAPACITY (Ah)	MAX. CONT. CURRENT (mA)
3B5400	AA	13.7	53.2	15.0	0.5	1.1	150
3B4800	C	24.9	52.3	52.0	2.2	4.4	250

Electrochem specializes in providing superior power solutions that enable the success and advancement of our customers' critical applications. We are keenly focused on ensuring quality throughout the entire design and manufacturing process to make certain our products live up to our reputation for industry leading quality, reliability, and safety. With a portfolio of cells in various chemistries, sizes and temperature ranges, we're confident we can provide a solution that meets your needs.

# Find The Solution You're Looking For

Below is a complete list of the cells Electrochem currently offers, grouped by rate capability and series. The chart to the right can help you narrow your search by using the temperature and rate requirements of your application to identify the cell series that best meets your needs.

## Moderate Rate

### 150MR Series

Open Circuit Voltage: 3.67V

Chemistry: Thionyl Chloride °C  -40° 150°

PART NUMBER	CELL SIZE	DIAMETER (mm)	LENGTH (mm)	CELL WEIGHT (g)	LITHIUM CONTENT (g)	CAPACITY (Ah)	MAX. CONT. CURRENT (mA)
4264	C	25.0	49.1	50.0	1.9	5.1	100
4302	C	25.9	50.0	52.0	1.9	5.7	100
4322	3/2 C	26.4	76.8	85.0	3.2	11	150
4242	Sub CC	20.7	101.6	75.0	3.3	9.0	200
4248	Sub CC	20.6	102.9	69.2	4.0	10	200
4325	CC	26.0	90.0	85.0	3.8	11.0	200
4287	CC	24.9	102.9	96.0	4.6	13	190
4339	CC	25.4	100.3	102.0	4.7	14	200
4342	CC	24.9	102.9	102.6	4.7	15	200
4362	D	33.0	59.5	105.0	3.7	11	170
4422	DD	31.8	127.0	212.0	8.2	26	550
4435	TSD	48.6	80.0	310.0	11.6	36	500

### 165MR Series


Open Circuit Voltage: 3.67V

Chemistry: Thionyl Chloride °C  -40° 165°

PART NUMBER	CELL SIZE	DIAMETER (mm)	LENGTH (mm)	CELL WEIGHT (g)	LITHIUM CONTENT (g)	CAPACITY (Ah)	MAX. CONT. CURRENT (mA)
4249	Sub CC	20.6	102.9	69.2	3.3	9.9	200
4330	CC	25.4	101.6	105.0	4.5	14	200
4285	CC	24.6	101.6	95.0	4.6	14	225
4338	CC	24.9	102.9	102.6	4.7	15	200
4363	D	33.0	59.5	105.0	3.5	11	200
4408	DD	32.8	127.0	223.3	7.7	25	500
4427	DD	31.8	127.0	212.0	8.2	26	500

### 180MR Series


Open Circuit Voltage: 3.67V

Chemistry: Thionyl Chloride °C  50° 180°

PART NUMBER	CELL SIZE	DIAMETER (mm)	LENGTH (mm)	CELL WEIGHT (g)	LITHIUM CONTENT (g)	CAPACITY (Ah)	MAX. CONT. CURRENT (mA)
4266	C	24.6	48.5	50.0	2.0	5.6	100
4323	3/2 C	26.4	76.8	90.2	3.3	9.0	200
4243	Sub CC	21.5	101.6	73.0	3.8	7.6	200
4252	Sub CC	20.7	103.2	73.0	3.2	8.5	200
4288	CC	24.6	101.6	95.0	4.7	11	170
4286	CC	24.6	101.6	100.0	4.7	11	200
4343	CC	25.4	102.9	110.0	5.0	12	200
4425	DD	32.3	126.5	220.0	8.8	24	320
4409	DD	32.8	127.0	220.0	8.3	24	320

### 200MR Series

Open Circuit Voltage: 3.67V

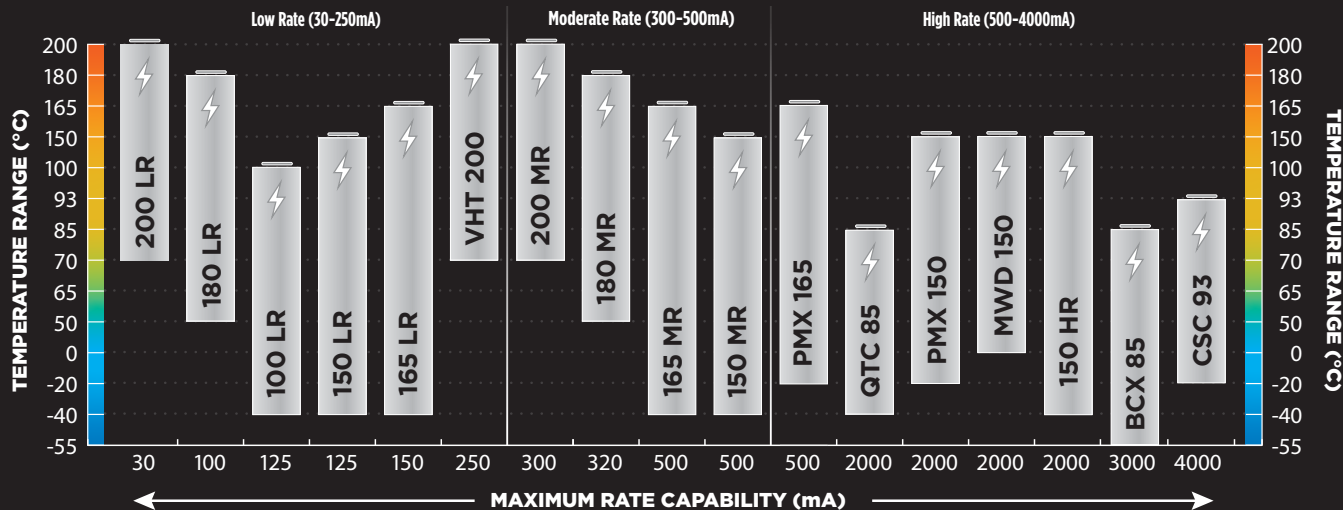
Chemistry: Thionyl Chloride °C  70° 200°

PART NUMBER	CELL SIZE	DIAMETER (mm)	LENGTH (mm)	CELL WEIGHT (g)	LITHIUM CONTENT (g)	CAPACITY (Ah)	MAX. CONT. CURRENT (mA)
4267	C	25.3	50.7	50.0	2.3	4.2	75
4245	Sub CC	20.6	101.6	80.0	4.2	5.9	100
4346	CC	25.4	102.4	110.0	5.0	9.0	100
4289	CC	24.6	101.6	95.0	5.4	9.0	150
4283	CC	24.6	101.6	100.0	5.4	9.3	100
4410	DD	32.8	127.0	220.0	7.2	20	300

**LOW MAGNETIC SIGNATURE (LMS)** versions of our cells are available for applications that are sensitive to magnetic interference.



# SERIES SELECTOR



## Low Rate

### BCX85 Series

Open Circuit Voltage: 3.9V

Chemistry: Bromine Chloride °C -55° 85°

PART NUMBER	CELL SIZE	DIAMETER (mm)	LENGTH (mm)	CELL WEIGHT (g)	LITHIUM CONTENT (g)	CAPACITY (Ah)	MAX. CONT. CURRENT (mA)
3B6050	Coin	25.4	7.6	10.0	0.3	0.95	10

### QTC85 Series

Open Circuit Voltage: 3.67V

Chemistry: Thionyl Chloride °C -40° 85°

PART NUMBER	CELL SIZE	DIAMETER (mm)	LENGTH (mm)	CELL WEIGHT (g)	LITHIUM CONTENT (g)	CAPACITY (Ah)	MAX. CONT. CURRENT (mA)
3B6880	Coin	25.4	7.6	10.0	0.3	1.0	3
3B6890	Coin	25.5	7.5	10.0	0.4	1.0	1

### CSC93 Series

Open Circuit Voltage: 3.93V

Chemistry: Sulfuryl Chloride °C -20° 93°

PART NUMBER	CELL SIZE	DIAMETER (mm)	LENGTH (mm)	CELL WEIGHT (g)	LITHIUM CONTENT (g)	CAPACITY (Ah)	MAX. CONT. CURRENT (mA)
3B6045	Coin	25.4	7.6	10.0	0.3	1.0	10

### 100LR Series

Open Circuit Voltage: 3.67V

Chemistry: Sulfuryl Chloride °C -40° 100°

PART NUMBER	CELL SIZE	DIAMETER (mm)	LENGTH (mm)	CELL WEIGHT (g)	LITHIUM CONTENT (g)	CAPACITY (Ah)	MAX. CONT. CURRENT (mA)
4006	Sub AAA	7.0	8.4	1.2	0.02	0.05	0.5
4019	Sub AAA	9.5	12.0	3.0	0.1	0.18	5
4021	Sub AAA	9.5	18.0	3.9	0.1	0.35	8
4030	Sub AAA	10.2	25.4	5.0	0.2	0.51	10
4040	Sub AAA	9.9	35.3	4.3	0.2	0.70	10
4347	CC	26.7	106.7	100.0	4.6	13	125

### 150LR Series

Open Circuit Voltage: 3.67V

Chemistry: Thionyl Chloride °C -40° 150°

PART NUMBER	CELL SIZE	DIAMETER (mm)	LENGTH (mm)	CELL WEIGHT (g)	LITHIUM CONTENT (g)	CAPACITY (Ah)	MAX. CONT. CURRENT (mA)
4037	Sub AAA	10.2	25.4	5.0	0.1	0.48	10
4161	1/2 AA	13.5	24.0	10.0	0.3	0.80	10
4204	AA	13.5	48.3	19.0	0.5	1.5	20
4301	C	26.3	49.6	52.0	1.8	5.6	60
4321	3/2 C	26.4	76.8	85.0	2.7	8.7	90
4282	CC	24.9	102.1	95.0	3.8	11	125
4341	CC	25.4	102.6	100.0	3.8	12	90

### 165LR Series

Open Circuit Voltage: 3.67V

Chemistry: Thionyl Chloride °C -40° 165°

PART NUMBER	CELL SIZE	DIAMETER (mm)	LENGTH (mm)	CELL WEIGHT (g)	LITHIUM CONTENT (g)	CAPACITY (Ah)	MAX. CONT. CURRENT (mA)
4205	AA	13.5	50.3	17.0	0.5	1.4	10
4320	3/2 C	26.3	76.2	77.7	3.0	8.5	150

### 180LR Series

Open Circuit Voltage: 3.67V

Chemistry: Thionyl Chloride °C -50° 180°

PART NUMBER	CELL SIZE	DIAMETER (mm)	LENGTH (mm)	CELL WEIGHT (g)	LITHIUM CONTENT (g)	CAPACITY (Ah)	MAX. CONT. CURRENT (mA)
4166	1/2 AA	13.9	24.5	10.0	0.3	0.77	10
4225	AA	13.5	50.0	16.8	0.5	1.4	15
4244	Sub CC	21.0	101.6	69.5	3.1	7.5	30
4284	CC	24.6	101.6	95.0	4.6	10	100

### 200LR Series

Open Circuit Voltage: 3.67V

Chemistry: Thionyl Chloride °C -70° 200°

PART NUMBER	CELL SIZE	DIAMETER (mm)	LENGTH (mm)	CELL WEIGHT (g)	LITHIUM CONTENT (g)	CAPACITY (Ah)	MAX. CONT. CURRENT (mA)
4230	AA	13.5	50.3	16.8	0.7	1.4	20
4247	Sub CC	21.0	101.6	69.2	2.4	6.0	30

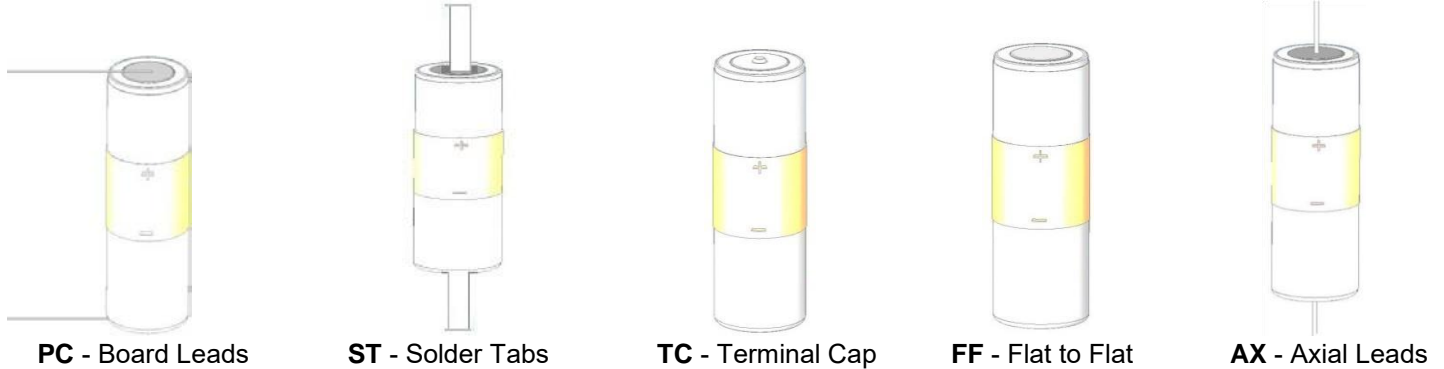


*Superior Performance,  
Trusted Innovation*



## Primary Lithium Cells High Rate Termination Styles

Electrochem cells are available in many termination styles to meet your demanding application's power requirements. Some of our most popular, off-the-shelf styles for our High Rate products are listed below. And, Electrochem will custom engineer new cell termination styles and new cell designs for your specific demands.



Chemistry	Size	Part Number	FF	ST	TC	PC	AX
BCX85	AA	3B0027	X	X	X	X	X
BCX85	AA	3B0064	X	X	X	X	X
BCX85	C	3B0070	X	X	X		X
BCX85	C-LMS	3B3800	X	X	X		
BCX85	D	3B0075	X	X	X		
BCX85	D-LMS	3B4000	X	X	X		
BCX85	DD	3B0076	X	X	X		
BCX85	TSD	3B6100			X		
BCX85	SD	3B4700	X	X		X	
CSC93	AA	3B0024	X	X	X	X	X
CSC93	1/2 C	3B0029	X				
CSC93	2/5 C	3B0665	X	X	X		
CSC93	C	3B0030	X	X	X		
CSC93	D	3B0035	X	X	X		
CSC93	DD	3B0036	X	X	X		
CSC93	TSD	3B6200	X	X			
PMX150	1/2 AA	3B5700	X	X	X		X
PMX150	AA	3B1065	X	X	X		X
PMX150	C	3B3700	X	X	X		
PMX150	CC	3B3000	X	X			
PMX150	DD	3B2800	X	X			
PMX165	C	3B5100	X	X	X		
PMX165	CC	3B5200	X	X			
MWD150	DD	3B3900	X	X			
VHT200	AA	3B5400	X	X	X		
VHT200	C	3B4800	X	X	X		

NOTE: This document is for reference only. This is not a complete parts list or description of available cells. Please contact Electrochem directly for more information.