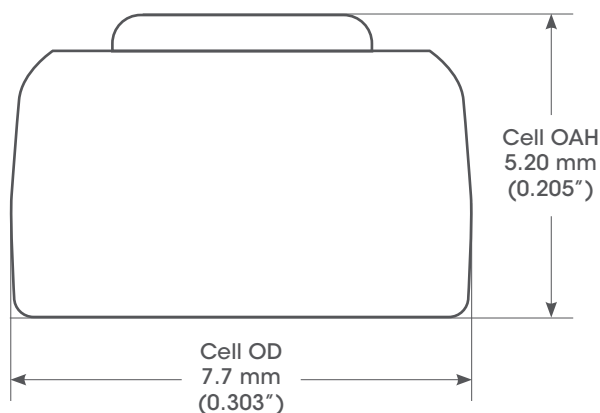


ZPower Size 13 Rechargeable Battery (XR48)

ZPower is dedicated to building a better battery technology. Our R&D has led to the creation of the ZPower Battery, a silver-zinc battery that can match and exceed the performance, safety and environmental benefits of any other rechargeable miniature battery.

Performance Parameters		Min	Nominal	Max	Units
Dimensions	Overall Height	5.00	5.20	5.40	mm
	Overall Diameter	7.55	7.70	7.90	mm
	Weight	860	910	960	mg
Capacity (full discharges)		-	40	-	mAh
Energy (full discharges)		-	65	-	mWh
Available Capacity (partial discharge cycling)		40	42	47	mAh
Available Energy (partial discharge cycling)		65	67	75	mWh
Energy Density		-	277	310	Wh/l
Open Circuit Voltage (full charge)		-	1.85	-	V
Open Circuit Voltage (discharged)		-	1.6	-	V
Discharge End Point Voltage		-	1.2	-	V
Charge Current		-	6.8	-	mA
Charge Voltage		-	2.00	2.01	V
Operating Temperature		0	-	40	°C
Storage Temperature		-20	-	50	°C
Self-Discharge Rate		-	-	2.5	%/month

Note: All Performance Parameters are based on 25°C ambient temperature.



Small On Size. Big On Power.

ZPower's silver-zinc rechargeable battery technology delivers over 40% more energy storage than other rechargeable miniature batteries.

400+ Recharges

Only ZPower's rechargeable silver-zinc battery technology can deliver over a year of dependable power, being recharged every day, without significant capacity fade.

Eco-Friendly and Safe

ZPower's batteries are one of the most environmentally responsible batteries available. They are water-based, nonflammable and fully recyclable.

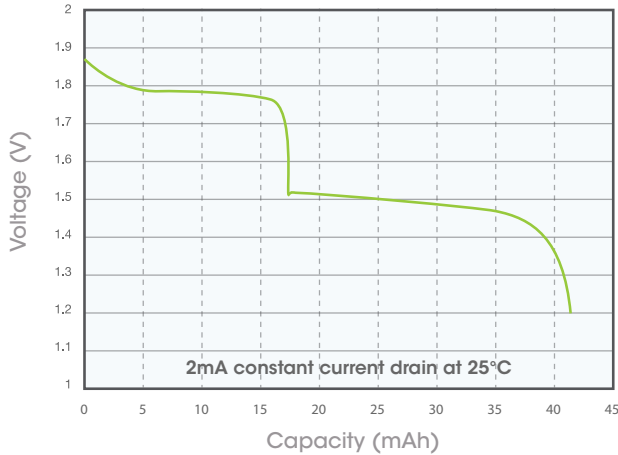
ZPower batteries have been tested by TUV Rheinland, passing all relevant UL2054 and IEC 62133 safety requirements.

American-Made Power & Quality

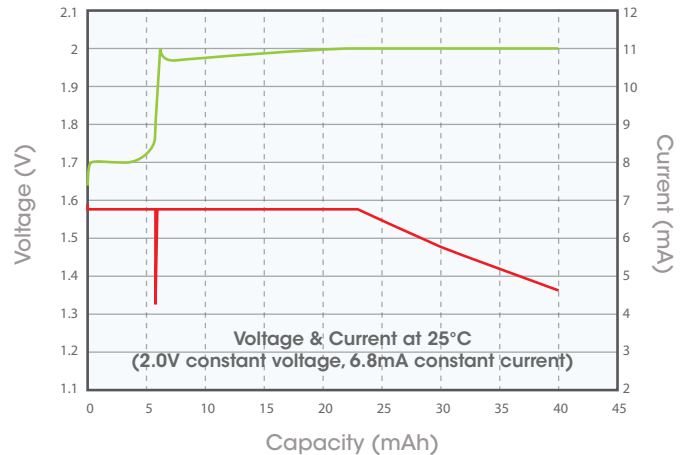
Every ZPower battery is made by American workers at our manufacturing plant in Camarillo, California.

ZPower Size 13 Rechargeable Battery (XR48)

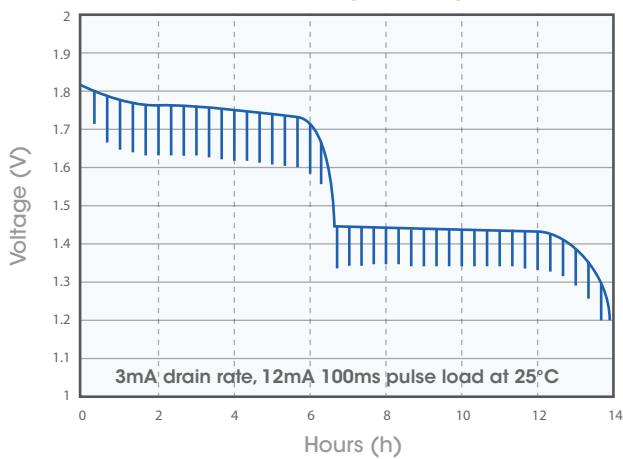
Discharge Curve (Typical)



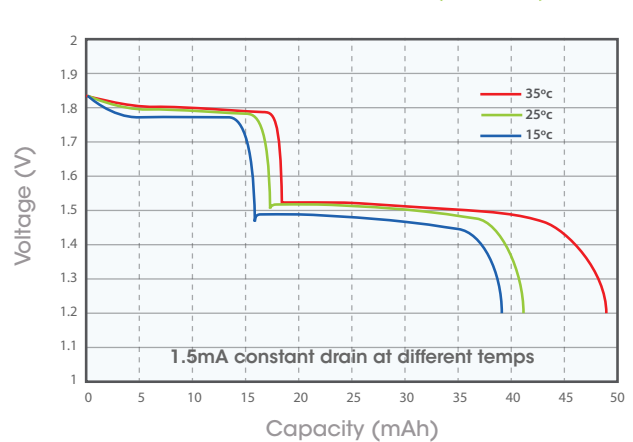
Charge Curve (Typical)



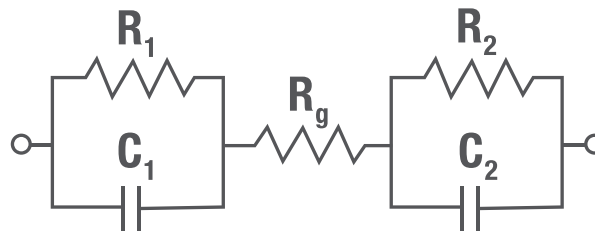
IEC 60086-2 7.4.2 Hearing Aid High Drain Test



Temperature Curves (Typical)



Equivalent Circuit Model



R ₁	C ₁	R _g	R ₂	C ₂
1.9Ω	650μF	7.5Ω	1.1Ω	63μF

Maximum 8.4Ω AC impedance at 1kHz and 25°C