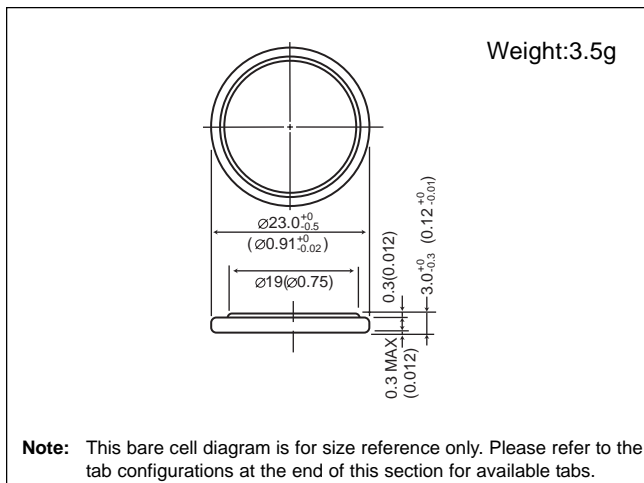


Vanadium Pentoxide Lithium Coin Batteries (VL Series): Individual Specifications

VL2330

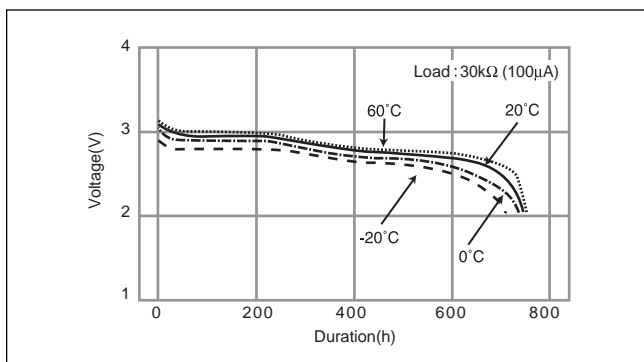
■ Dimensions(mm)



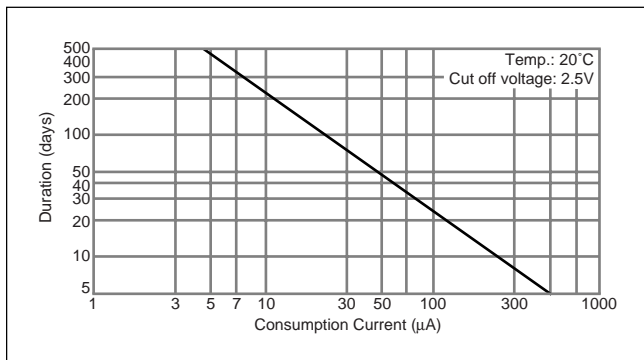
■ Specification

Nominal voltage (V)	3
Nominal capacity (mAh)	50.0
Continuous standard load (mA)	0.1
Operating temperature (C)	-20 ~ +60

■ Discharge Temperature Characteristics

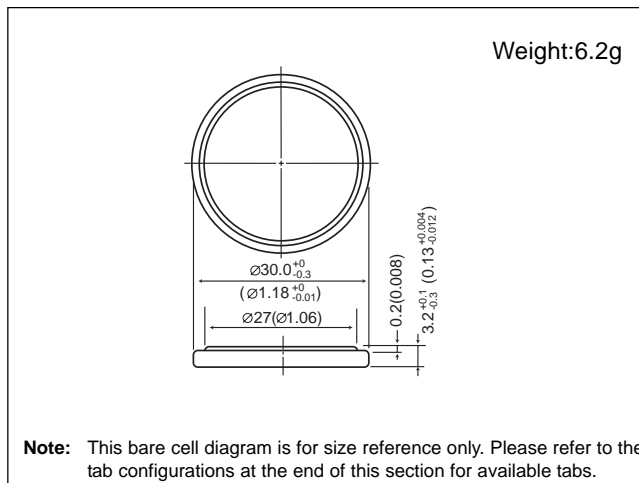


■ Consumption current vs. Duration time



VL3032

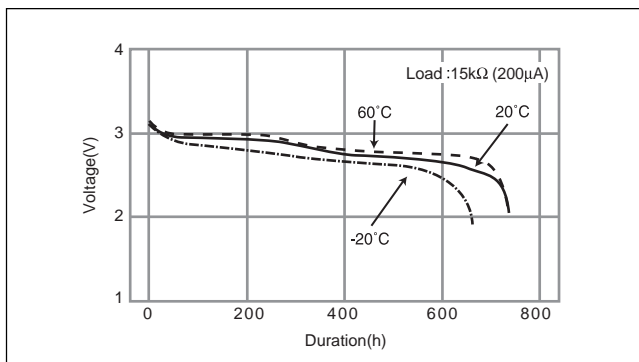
■ Dimensions(mm)



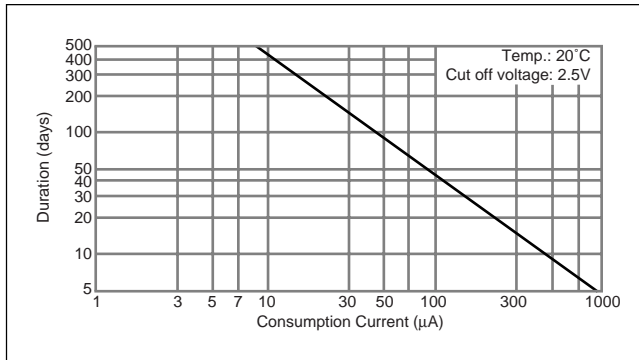
■ Specification

Nominal voltage (V)	3
Nominal capacity (mAh)	100.0
Continuous standard load (mA)	0.2
Operating temperature (C)	-20 ~ +60

■ Discharge Temperature Characteristics



■ Consumption current vs. Duration time



Rechargeable Lithium Coin Batteries

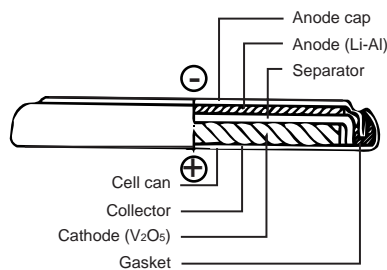
Vanadium Pentoxide Lithium Rechargeable Batteries (VL series)



Features

These coin-type lithium batteries feature vanadium oxide for the positive pole, lithium alloy for the negative pole and a non-aqueous solvent for the electrolyte.

Construction



Applications

- Memory backup power supplies for office automation equipment (personal computers, fax machines, etc.), audio-video equipment (VTRs, etc.), communications equipment (mobile phones, etc.), etc.
- Hybrid systems with solar batteries (solar remote controllers, etc.)



General Specifications

Model	Electrical Characteristics (20°C)			Dimensions (mm)		Weight (g)	JIS	IEC
	Nominal Voltage (V)	*Nominal Capacity (mAh)	Continuous Drain (mA)	Diameter	Height			
VL621	3	1.5	0.01	6.8	2.1	0.27	-	-
VL1220	3	7.0	0.02	12.5	2.0	0.8	-	-
VL2020	3	20.0	0.07	20.0	2.0	2.2	-	-
VL2320	3	30.0	0.10	23.0	2.0	2.7	-	-
VL2330	3	50.0	0.10	23.0	3.0	3.5	-	-
VL3032	3	100.0	0.20	30.0	3.2	6.2	-	-

* Nominal capacity shown above is based on standard drain and cut off voltage down to 2.5V at 20°C.

Vanadium Pentoxide Lithium Rechargeable Batteries (VL Series):

TAB CONFIGURATIONS

Model No.	Tab Type		Configuration Diagram No.	Nominal	
	With Insulation Wrap	Without Insulation Wrap		Voltage (V)	Capacity (mAh)
VL621		/F9D	1	3	1.5
VL1220	/1HF		2	3	7
	/1VC		3	3	7
	/1FC		4	3	7
	/1FC2		5	3	7
		/1F5U	6	3	7
VL2020	/1VC		7	3	20
	/1GU7		8	3	20
	/1HF		9	3	20
VL2320	/1VC		10	3	30
	/1HF		11	3	30
	/1F2		12	3	30
VL2330	/1VC		13	3	50
	/1HF		14	3	50
	/1F3		15	3	50
VL3032		/1GUF	16	3	100
	/1F2		17	3	100

Notes:

- A) To ensure proper electrical contact, it is recommended that rechargeable coin cell batteries be used with tabs for PC Board mounting.
- B) Please contact Panasonic for requests on custom tab configurations. Minimum order requirements may apply.

VL Series Tab Configurations

DIMENSIONS / MM (INCH) cont.

Model No.	Dimensions/mm (inch)	Model No.	Dimensions/mm (inch)
VL2320/1HF (30mAh)		VL2320/1F2 (30mAh)	
VL2330/1VC (50mAh)		VL2330/1HF (50mAh)	
VL2330/1F3 (50mAh)		VL3032/1GUF (100mAh)	
VL3032/1F2 (100mAh)			