

Encapsulated Batteries (Power Modules)

Overview



Why use encapsulated batteries (Power Modules)?

RENATA Power Modules were specially designed for applications with long life expectations in a difficult environment, e.g. outdoors or under dusty or high humidity conditions. The cell is hermetically sealed in a plastic case which protects the sealing system of the cell itself against negative external influences. In addition, it reduces the evaporation of electrolyte from the battery as well as the diffusion of humidity from the environment into the cell through the polymeric plastic gasket. An ideal solution for use in off-shore property or tropical areas.

RENATA Power Modules are available as solder or plug-in versions, with or without incorporated decoupling diodes.

Features

- Hermetically sealed
- Max. protection against harsh environmental conditions (hot, humid or dusty areas)
- Low self-discharge
- Operating and storage temperature: $-40^{\circ}/+85^{\circ}\text{C}^{1)}$
- Suitable for wave soldering
- Free of heavy metals
- Gold-plated plug-in pins for best contact reliability

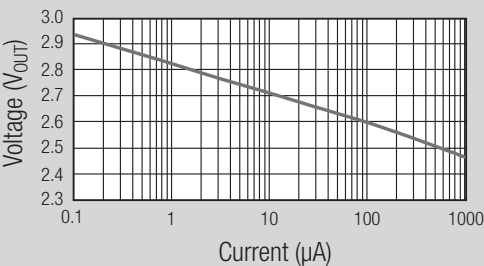
Specifications

- Power Module case: Polyamide
- Soldering contacts: Isotan²⁾ (55% CU, 44% Ni, Mn)

Model Matrix		With Decoupling Diodes	Without Decoupling Diodes
Horizontal mounting	For soldering	1000-1, (page 34)	175-0; 1000-0, (page 35)
	For plug-in	1000-1B, (page 36)	175-0B; 1000-0B, (page 37)
Vertical mounting	For soldering	175-2, (page 33)	338A, (page 34)

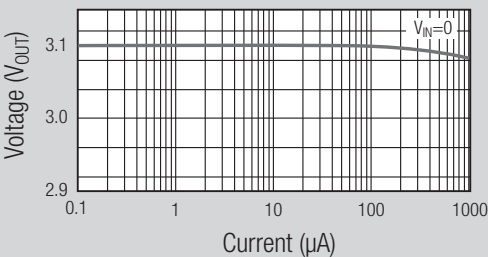
with decoupling diodes

Output Voltage vs. Output Current



without decoupling diodes

Output Voltage vs. Output Current



1) In applications where the Power Module is exposed to temperatures above 70°C, please contact Renata for consultancy.

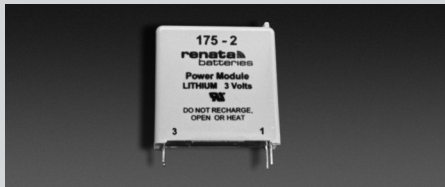
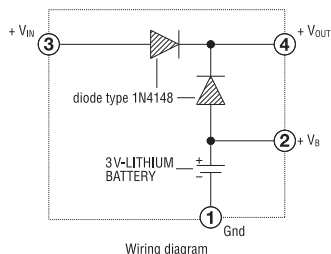
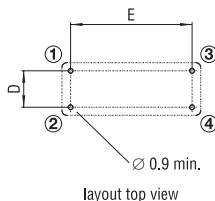
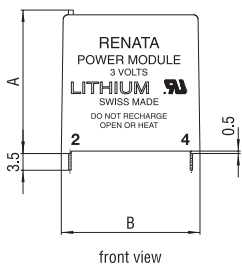
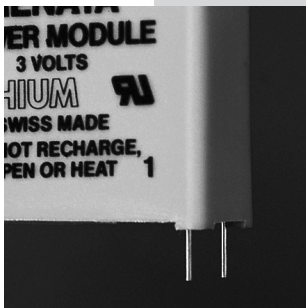
2) Isotan® is a registered trademark of Isabellenhütte Heusler GmbH & Co. KG.

Encapsulated Batteries (Power Modules)

For soldering



Versions for vertical mounting, with decoupling diodes



Model	Dimensions (mm)					Weight (g)	Nominal Voltage (V)	Nominal Capacity (mAh)	Standard Current (mA)	Max. cont. Current (mA)	Part.No.*
	A	B	C	D	E						
175-2	25	24	8.5	5.08	20.32	6.5	3	235	0.4	3.0	700044

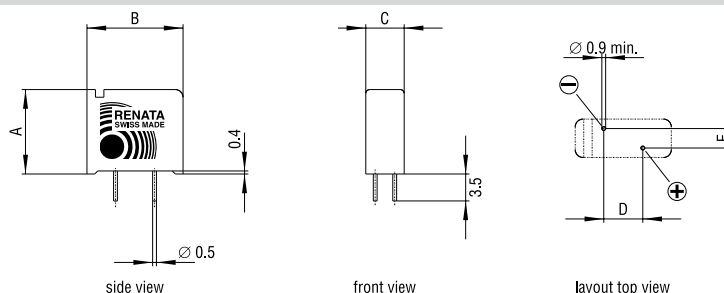
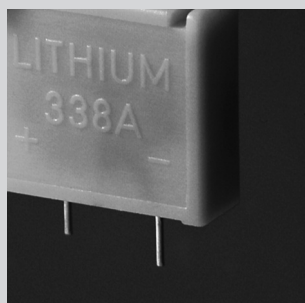
*Packaging: Industrial Bulk (IB-Trays)

Encapsulated Batteries (Power Modules)

For soldering

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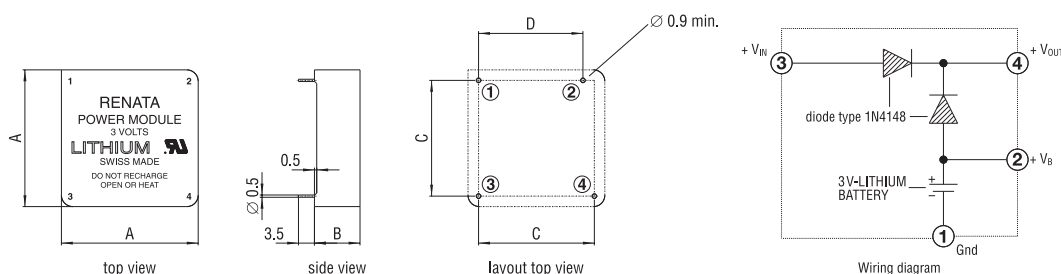
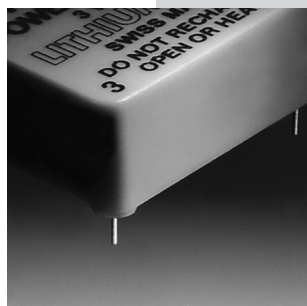
Versions for vertical mounting, without decoupling diodes.



Model	Nominal Voltage (V)	Capacity (mAh)	Chemistry	Dimensions (mm)					Weight (g)	Part.No.*
				A	B	C	D	E		
338A	3	48	MnO ₂ /Li	13.5	15.0	5.0	7.6	2.54	1.69	700101

*Packaging: Industrial Bulk (IB-Trays)

Versions for horizontal mounting, with decoupling diodes.



Model	Dimensions (mm)				Weight (g)	Nominal Voltage (V)	Nominal Capacity (mAh)	Standard Current (mA)	Max. cont. Current (mA)	Part.No.*
	A	B	C	D						
1000-1	30	10	25.4	22.9	15	3	950	1.0	2.5	700035

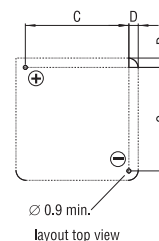
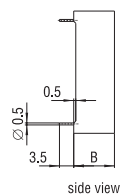
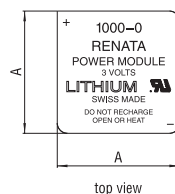
*Packaging: Industrial Bulk (IB-Trays)

Encapsulated Batteries (Power Modules)

For soldering



Versions for horizontal mounting, without decoupling diodes. 



Model	Dimensions (mm)				Weight (g)	Nominal Voltage (V)	Nominal Capacity (mAh)	Standard Current (mA)	Max. cont. Current (mA)	Part.No.*
	A	B	C	D						
175-0	22	8	17.8	2.1	6.5	3	235	0.4	3.0	700040
1000-0	30	10	25.4	2.3	15	3	950	1.0	2.5	700031

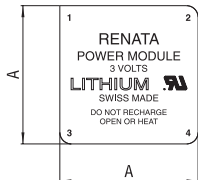
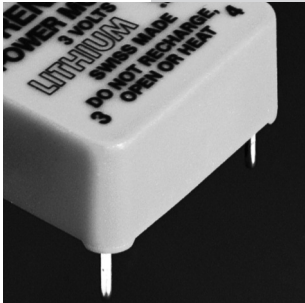
*Packaging: Industrial Bulk (IB-Trays)

Encapsulated Batteries (Power Modules)

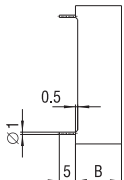
For plug-in



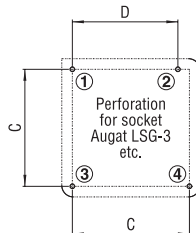
Versions for horizontal mounting, with decoupling diodes. 



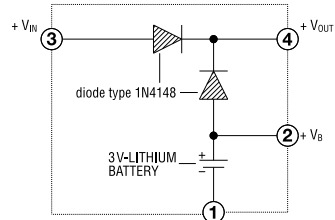
top view



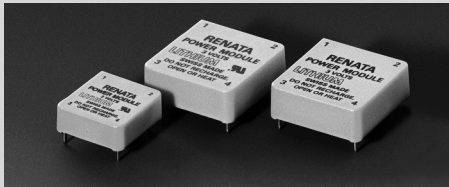
side view



layout top view



Wiring diagram



Model	Dimensions (mm)				Weight (g)	Nominal Voltage (V)	Nominal Capacity (mAh)	Standard Current (mA)	Max. cont. Current (mA)	Part.No.*
	A	B	C	D						
1000-1B	30	10	25.4	22.9	15	3	950	1.0	2.5	700036

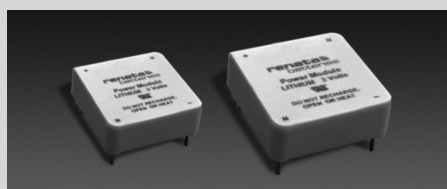
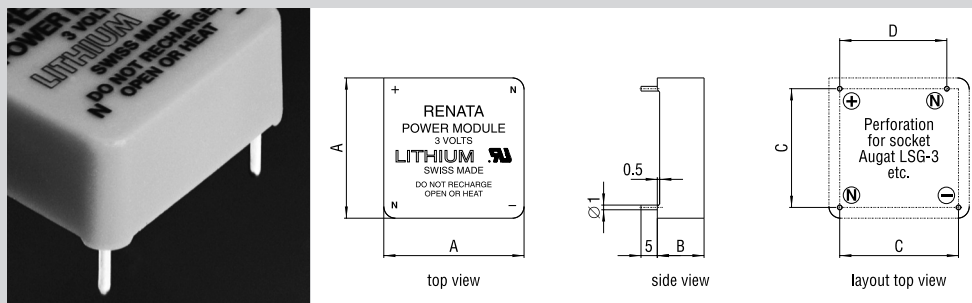
*Packaging: Industrial Bulk (IB-Trays)

Encapsulated Batteries (Power Modules)

For plug-in

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Versions for horizontal mounting, without decoupling diodes. 



Model	Dimensions (mm)				Weight (g)	Nominal Voltage (V)	Nominal Capacity (mAh)	Standard Current (mA)	Max. cont. Current (mA)	Part.No.*
	A	B	C	D						
175-0B	22	8	17.8	15.3	6.5	3	235	0.4	3.0	700041
1000-0B	30	10	25.4	22.9	15	3	950	1.0	2.5	700033

*Packaging: Industrial Bulk (IB-Trays)

Encapsulated Batteries (Power Modules)

Packaging options



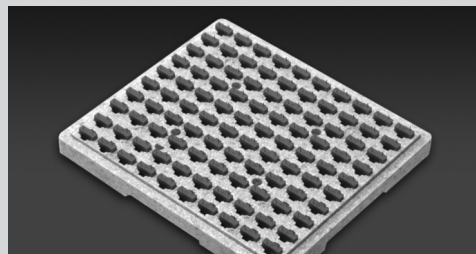
All encapsulated batteries (Power Modules) are supplied in the following packaging

Industrial Bulk multi-cell trays

Packaging Code: IB

Industrial Bulk packaging is the standard packaging for manufacturers.

The number of encapsulated batteries per tray depends on the respective model. So does the number of trays per shrink pack.





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.