EnerCera®
Rechargeable Li-ion Batteries

Expand what's possible:

Smaller,
Lighter,
Thinner

Ultra Thin

Heat Resistance

Low-Temperature operation

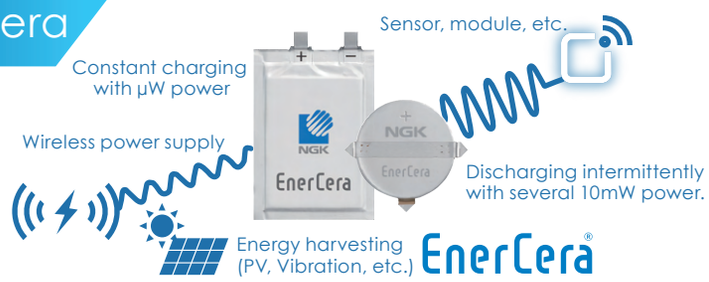
High Power

Battery optimized for small maintenance free IoT devices

Battery Optimized for Small Maintenance Free IoT Devices

Future world enabled by EnerCera

With EnerCera battery, you can achieve maintenance-free IoT device and reduce the needs for battery replacement, saving you time and cost. Try it today and create new value with EnerCera battery!



Life
- ○Air monitoring
- ○Healthcare
- ○Wearable device
- ○Smart card
- ○Smart home
- ○ID card

Logistics and Retail
- ○Temperature control/mapping
- ○Electronic shelf label
- ○Tag with sensor
- ○Location tracking

Industrial
- ○Smart agriculture
- ○Memory backup
- ○Smart factory
- ○Real time clock backup
- ○Sensor module
- ○Worker monitoting
- ○Infrastructure monitoring

Automotive
- ○Tire pressure sentor
- ○HMI
- ○Smart key
- ○Sencor for autonomous driving

EnerCera® Lineup

Product Points		EnerCera® Pouch ●Ultra thin and bendable pouth type cell (thickness: 0.45mm) ●Can be embedded in IC card by hot lamination process ●Large current output (several 100mA)			EnerCera® Coin ●Heat resistant coin type cell (Operating temperature up to 105℃) ●Can be mounted on board by Reflow soldering ●Large current output (several 10mA)	
		EC382704P-T	EC382704P-Hr	ET382704P-H	ET2016C-R	ET1210C-H
						
Dimensions/Diameter (without terminals)		38mm×27mm			20mm	12.5mm
Thickness (with terminals)		0.45mm			2.05mm	1.3mm
Nominal Capacity		27mAh (4.3V) 24mAh (4.2V)	20mAh	20mAh	25mAh	4mAh
Nominal Voltage		3.8V		2.3V		
Charge	Charging Method	Constant Current (CC)-Constant Voltage (CV) charging		Constant Voltage (CV) charging (No current control required)		
	Charging Voltage	4.3V 4.2V	4.2V	2.7V		
	Standard Charge Current	13.5mA (4.3V) 12.0mA (4.2V)	10mA	–		
Discharge	End Voltage	3.0V		1.5V		
	Standard Discharge Current※1	27mA (4.3V) 24mA (4.2V)	10mA	40mA	2.5mA	0.8mA
	(Ref.) Peak Discharge Currrent※2	560mA	130mA	300mA	60mA	20mA
Bendability		Conforming to ISO/IEC 10373-1 standard No deterioration after bending and torsion tests			–	
Operation Temperature		Discharge : -20℃～45℃ (Charge: 0℃～45℃)	Discharge : -20℃～60℃ (Charge : 0℃～60℃)	-40℃～70℃		-20℃※6～105℃
Features		High power	High heat resistance※3	Fast charging※4	Reflow soldering unapplicable※5	Reflow soldering applicable※7

※1 Current with which nominal capacity can be used. ※2 Voltage drop is less than 0.5V with continuous discharge for 0.1sec. (at 25℃) ※3 Compatible with hot lamination for IC card.
※4 Can be charged from 0% to 80% capacity in 14min. ※5 Applicable type under development. ※6 From -40℃ to 105℃ for RTC backup applications.
※7 Recommended conditions Max.240℃×1 time. Please contact us for details. IEC62133 certified. Contents may be changed without notice.

Contact

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Corporate site

New
Special site open!