

Expand what's possible:

EnerCera[®]
Rechargeable Li-ion Batteries

**Smaller,
Lighter,
Thinner**



1.3 Thickness
mm

size : 12.5mm

0.45 Thickness
mm

size : w27mm x h38mm

Ultra
Thin

Heat
Resistance

Low-
Temperature
operation

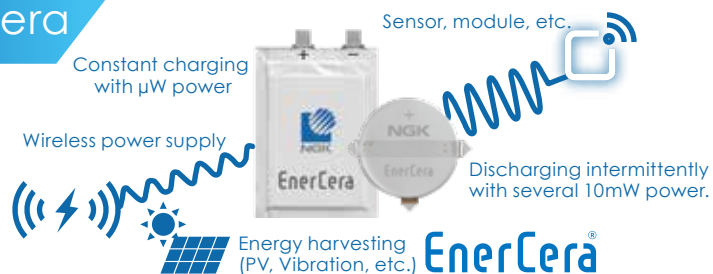
High
Power

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
- Smart factory
- Sensor module
- Infrastructure monitoring
- Memory backup
- Real time clock backup
- Worker monitoring

Automotive

- Tire pressure sensor
- HMI
- Smart key
- Sensor for autonomous driving

EnerCera® Lineup

Product Points	EnerCera® Pouch			EnerCera® Coin	
	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	Constant Current (CC)- Constant Voltage (CV) charging			Constant Voltage (CV) charging (No current control required)	
	Charging Voltage			Charging Voltage	
	Standard Charge Current			Standard Charge Current	
Discharge	End Voltage			End Voltage	
	Standard Discharge Current ^{※1}			Standard Discharge Current ^{※1}	
	(Ref.) Peak Discharge Current ^{※2}			(Ref.) Peak Discharge Current ^{※2}	
Bendability	Conforming to ISO/IEC 10373-1 standard No deterioration after bending and torsion tests			-	
Operation Temperature	Discharge : -20°C~45°C (Charge: 0°C~45°C)	Discharge : -20°C~60°C (Charge : 0°C~60°C)	-40°C~70°C		-20°C ^{※6} ~105°C
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°C) ※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°C to 105°C for RTC backup applications.
 ※7 Recommended conditions Max.240°C×1 time. Please contact us for details. IEC62133 certified. Contents may be changed without notice.

Contact



Sales Department
Electronic Devices Division
Digital Society Business Group

enercera-sales@ngk.co.jp

Corporate site



Special site open!

New

