

**BBCV2.MH13421**
Lithium Batteries - Component[Page Bottom](#)**Lithium Batteries - Component**[See General Information for Lithium Batteries - Component](#)**FDK CORPORATION**

MH13421

Shinagawa Crystal Square Bldg. 1-6-41 Konan
Minato-ku, Tokyo 108-8212 JAPAN

Model No.	Primary Type ^[a]	Max Abnormal Charging Current mA	Max Abnormal Charging Voltage, V dc	Replacement [b],[c]
2CR-1/3N (I)	Lithium/manganese dioxide (Cylindrical)	2	12	User
2CR5	Lithium/manganese dioxide (Coin)	25	12	User
2CR5u (k)	Lithium/manganese dioxide (Cylindrical)	25	-	User
CF042039@	Lithium/manganese dioxide (Pouch)	3.0	12.0	Technician
CF042223@	Lithium/manganese dioxide (Pouch)	3	12	Technician
CF042722@	Lithium/manganese dioxide (Prismatic)	3	12	Technician
CF042722U@	Lithium/manganese dioxide (Prismatic)	3	12	Technician
CF043329@	Lithium/manganese dioxide (Pouch)	3	12	Technician
CF052039@	Lithium/manganese dioxide (Pouch)	3	12	Technician
CF052722@	Lithium/manganese dioxide (Prismatic)	3	12	Technician
CF052722U@	Lithium/manganese dioxide (Pouch)	3	12	Technician
CP-V9J	Lithium/manganese dioxide (Prismatic)	3	10	User
CP-V9Ju	Lithium/manganese dioxide (Prismatic)	3	10	Technician
CR-1/3N (I)	Lithium/manganese dioxide	2	12	User
CR-P2	Lithium/manganese dioxide	25	12	User
CR-V3	Lithium/manganese dioxide	50	12	User
CR-V9	Lithium/manganese dioxide	20	24	User
CR1/26.L	Lithium/manganese dioxide (Cylindrical)	5	-	User

CR1/26LHT	Lithium/manganese dioxide (Cylindrical)	5	12	User
CR1/28.L	Lithium/manganese dioxide (Cylindrical)	5	-	User
CR1216s (m)	Lithium/manganese dioxide (Coin)	2.5	12	User
CR1216v*	Lithium/manganese dioxide (Coin)	3.5	-	User
CR1220 (I)*	Lithium/manganese dioxide	3	12	User
CR1220s (I)	Lithium/manganese dioxide (Coin)	3	12	User
CR1220v*	Lithium/manganese dioxide (Coin)	10	-	User
CR123A	Lithium/manganese dioxide	25	12	User
CR123Au (k)	Lithium/manganese dioxide (Cylindrical)	25	-	User
CR12600SE (I)	Lithium/manganese dioxide	15	12	Technician
CR142450SEK (I)	Lithium/manganese dioxide (Cylindrical)	10	12	Technician
CR14250SE (I)	Lithium/manganese dioxide	10	12	Technician
CR14250SE-R (I)	Lithium/manganese dioxide	10	12	Technician
CR14500 (I)	Lithium/manganese dioxide	25	12	User
CR14500SE (I)	Lithium/manganese dioxide	10	12	Technician
CR15270 (I)	Lithium/manganese dioxide	20	12	User
CR15400 (I)(i)	Lithium/manganese dioxide	25	12	User
CR1616s (m)	Lithium/manganese dioxide (Coin)	2.5	12	User
CR1616v*	Lithium/manganese dioxide (Coin)	4	-	User
CR1620(m)	Lithium/manganese dioxide (Coin)	4	12	User
CR1620s (m)	Lithium/manganese dioxide (Coin)	4	12	User
CR1620v	Lithium/manganese dioxide (Coin)	2.5	-	User
CR1632s (m)	Lithium/manganese dioxide (Coin)	4	12	User
CR1632u	Lithium/manganese dioxide (Coin)	4	-	User
CR17335 (I)(i)	Lithium/manganese dioxide	25	12	User
CR17335E-N (I)	Lithium/manganese dioxide	25	12	User
CR17335E-R (I)	Lithium/manganese dioxide	25	12	User
CR17335EF (I)	Lithium/manganese dioxide	25	12	User
CR17335EG (I)	Lithium/manganese dioxide (Cylindrical)	25	12	User
CR17335EL (I)	Lithium/manganese dioxide	25	12	User

	(Cylindrical)			
CR17335ES (I)	Lithium/manganese dioxide (Cylindrical)	25	12	User
CR17335HE-R (I)	Lithium/manganese dioxide	25	12	User
CR17335HEF (I)	Lithium/manganese dioxide (Cylindrical)	25	12	User
CR17335SE (I)	Lithium/manganese dioxide	15	12	Technician
CR17335SE-R (I)	Lithium/manganese dioxide	15	12	User
CR17450E-N (I)	Lithium/manganese dioxide	25	12	User
CR17450E-R (I)(J)	Lithium/manganese dioxide	25	12	User
CR17450EG (I)	Lithium/manganese dioxide (Cylindrical)	25	12	User
CR17450ENS (I)	Lithium/manganese dioxide	25	12	User
CR17450ES (I)	Lithium/manganese dioxide (Cylindrical)	25	12	User
CR17450ESK	Lithium/manganese dioxide (Cylindrical)	25	12	User
CR17450HE-N (I)	Lithium/manganese dioxide	25	12	User
CR17450HE-R (I)	Lithium/manganese dioxide	25	12	User
CR17450SE (I)	Lithium/manganese dioxide	15	12	Technician
CR17450SE-R (I)	Lithium/manganese dioxide	15	12	User
CR17500EP (I)(n)	Lithium/manganese dioxide (Cylindrical)	25	12	User
CR2	Lithium/manganese dioxide	20	12	User
CR2/36.L	Lithium/manganese dioxide (Cylindrical)	5	-	User
CR2/36L (k)	Lithium/manganese dioxide (Cylindrical)	5	12	User
CR2/36LHC (k)	Lithium/manganese dioxide (Cylindrical)	5	12	User
CR2/36LHT (k)	Lithium/manganese dioxide (Cylindrical)	5	12	User
CR2/38.L	Lithium/manganese dioxide (Cylindrical)	15.0	12.0	User
CR2016 (I)*	Lithium/manganese dioxide	10	12	User
CR2016s (I)	Lithium/manganese dioxide (Coin)	10	12	User
CR2016T	Lithium/manganese dioxide (Coin)	2.5	-	User
CR2016U, CR-2016U	Lithium/manganese dioxide (Coin)	4	-	User
CR2016v*	Lithium/manganese dioxide (Coin)	10	-	User

CR2025 (I) *	Lithium/manganese dioxide	10	12	User
CR2025(m)	Lithium/manganese dioxide (Coin)	10	12	User
CR2025s (I)	Lithium/manganese dioxide (Coin)	10	12	User
CR2025T	Lithium/manganese dioxide (Coin)	5	-	User
CR2025U, CR-2025U	Lithium/manganese dioxide (Coin)	5	-	User
CR2025v*	Lithium/manganese dioxide (Coin)	5	-	User
CR2032 (I) *	Lithium/manganese dioxide	10	12	User
CR2032(m)	Lithium/manganese dioxide (Coin)	10	12	User
CR2032s (I)	Lithium/manganese dioxide (Coin)	10	12	User
CR2032T	Lithium/manganese dioxide (Coin)	5	-	User
CR2032U, CR-2032U	Lithium/manganese dioxide (Coin)	5	-	User
CR2032v*	Lithium/manganese dioxide (Coin)	10	-	User
CR23500SE (I)	Lithium/manganese dioxide	20	12	Technician
CR23500SE-R (I)	Lithium/manganese dioxide	20	12	Technician
CR2430 (I) *	Lithium/manganese dioxide	15	12	User
CR2430s (I)	Lithium/manganese dioxide (Coin)	25	-	User
CR2430v	Lithium/manganese dioxide (Coin)	25	-	User
CR2450 (I) *	Lithium/manganese dioxide (Coin)	100	-	User
CR2450s (I)	Lithium/manganese dioxide (Coin)	100	-	User
CR2450v*	Lithium/manganese dioxide (Coin)	15	-	Technician
CR2477v*	Lithium/manganese dioxide (Coin)	10	-	Technician
CR2u (k)	Lithium/manganese dioxide (Cylindrical)	20	-	User
CR6.L	Lithium/manganese dioxide (Cylindrical)	15	-	Technician
CR6LHT	Lithium/manganese dioxide (Cylindrical)	20	-	Technician
CR8.L	Lithium/manganese dioxide (Cylindrical)	5	-	Technician
CR8.LHC	Lithium/manganese dioxide (Cylindrical)	5	-	Technician
CR8L	Lithium/manganese dioxide (Cylindrical)	5	-	Technician

CR8LHT	Lithium/manganese dioxide (Cylindrical)	10	-	Technician
--------	--	----	---	------------

Model No.	Secondary Type ^[d]	Max Charging Current (I _c), mA	Max Charging Voltage, V dc ^[e]	Test Compliance ^[f]
ML1220*	Lithium ion (Coin)	300	5.0	1
ML2016*	Lithium ion (Coin)	300	5.0	1
ML2020*	Lithium ion (Coin)	300	12	1
ML2430*	Lithium ion (Coin)	300	5.0	1
ML410R	Lithium ion (Coin)	100	5	1
ML410RU	Lithium ion (Coin)	100	5	1
ML414	Lithium ion (Coin)	100	5	1
ML414R	Lithium ion (Coin)	56	12	1
ML414RU	Lithium ion (Coin)	100	5	1
ML414U	Lithium ion (Coin)	100	5	1
ML421	Lithium ion (Coin)	100	5	1
ML614	Lithium ion (Coin)	100	5	1
ML614R	Lithium ion (Coin)	300	5.0	1
ML621	Lithium ion (Coin)	300	5.0	1
NBL410R	Lithium ion (Coin)	56	12	1
NBL414	Lithium ion (Coin)	56	5	1
NBL414R	Lithium ion (Coin)	56	5	1
NBL421	Lithium ion (Coin)	56	12	1
NBL614	Lithium ion (Coin)	32	5	1
NBL621	Lithium ion (Coin)	15	5	1
TL410R	Lithium ion (Coin)	10	7	1
TL414R	Lithium ion (Coin)	10	7	1
TL421	Lithium ion (Coin)	10	7	1
UR630	Lithium ion (Coin)	150	5	1
UR655	Lithium ion (Coin)	240	4.5	1
UR755	Lithium ion (Coin)	400	12	1
UT414	Lithium ion (Coin)	100	5	1
UT614	Lithium ion (Coin)	100	5	1
UT621	Lithium ion (Coin)	100	5	1

[a] These cells and batteries are not rechargeable. The circuit containing these cells or batteries is to contain a protective component that prevents charging. The circuitry is to include a current-limiting component intended to protect the cell or battery, in the event the protective component malfunctions, from a charging current in excess of the maximum abnormal charging current indicated.

[b] User - These primary cells and batteries are intended for use in applications subject to replacement by a user.

[c] Technician - These primary cells and batteries are intended for use in applications subject to replacement only by a trained service technician.

[d] These cells and batteries are rechargeable. The circuitry containing these cells or batteries is to contain protective components intended to protect the cells or batteries from currents in excess of the maximum charging current and voltage indicated.

[e] The Max Charging Voltage noted in the column is the maximum voltage employed during the abnormal charging test of the secondary lithium ion cell. However, the maximum recommended charging voltage for lithium ion cells is 4.2 V, unless indicated otherwise.

[f] Test Compliance - The cells comply with the tests in UL 1642 as noted:

- 1 - Complies with all single-cell tests
- 2 - Complies with all single-cell tests except the impact test
- 3 - Complies with all single-cell tests except the projectile test
- 4 - Complies with all single-cell tests except the crush test

(i) - These cells can be used in series with a maximum of two cells of same model number or in parallel with up to a maximum of four cells of the same model number.

(j) - The cell model CR17450E-R can be used in 2S2P configuration with the listed fuse type 20N 2000 (E195833). On the other hand, this model can be used in 1S2P configuration without external safety protection.

(k) - These cells can be used in series with a maximum of three cells of the same model number

(l) - The cells or batteries may come with an optional single or multiple alphanumeric suffixes denoting various pin, tab, cap, or wire termination types. For model CR17450ES, Suffix "K" shall not be used.

(m) - These cells and batteries may come with an optional single or multiple alphanumeric denoting various pin, tab, cap or wire termination types.

* - These cells may have various insulating tube, ring or tape.

@ - Model may optionally be supplied with a support part (aluminum laminate film) on the terminal side.

n - The cell model CR17500EP can be used in 1S2P and 2S1P configuration without external safety protection.

Marking: Company name or tradename "FDK", "FUJI NOVEL", "FUJITSU", "MH13421", "NOVEL" or trademark

FDK 株式会社, FDK 株式会社, Recognized Component Mark,  on the cell or smallest shipping package containing the cell.

[Last Updated](#) on 2016-08-31

[Questions?](#)

[Print this page](#)

[Terms of Use](#)

[Page Top](#)

© 2016 UL LLC

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service. Always look for the Mark on the product.

UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Assemblies, Constructions, Designs, Systems, and/or Certifications (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission from UL" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "© 2016 UL LLC".

