

VINA Tech HyCap

LITHIUM ION CAPACITOR

PART NUMBER SYSTEM

VLC RS 3R8 406 MG

VLC VINA Lithium ion capacitor (series)

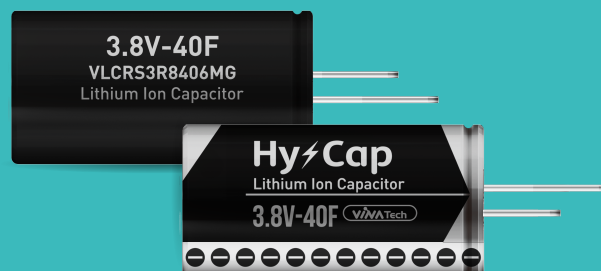
RS Low resistance type(Characteristics)

3R8 3.8V (Maximum available voltage) *R=Decimal point

406 40F(40 X 10⁶μF) Capacitance

M -15 ~ +15% Capacitance Tolerance

G Standard Design

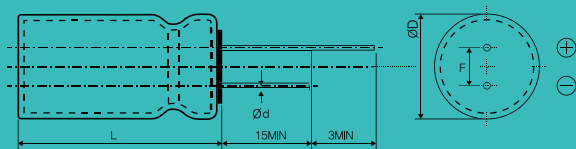


Reliability data

Items	Specifications	Test Conditions
1. Operating temperature range	-30 ~ + 85	—
2. Maximum available voltage	3.8	Within the Operating Temperature Range (3.5V when over 70~85℃)
3. Minimum available voltage	2.2	Within the Operating Temperature Range (2.5V when over 70~85℃)
4. Soldering	Capacitance : Within initial spec. DCR : Within initial spec. Appearance : No noticeable abnormality	Material : Sn-3Ag-0.5Cu Soldering iron temperature : 390±5℃ Duration : 3sec The soldering iron of the above conditions is applied twice to the lead wire (+pole, -pole) 1mm away from the cell main body.
5. Floating charge characteristics-1	Capacitance : Over 80% of initial spec. Internal resistance : Within 1.5 times of initial spec. Appearance : No noticeable abnormality.	Apply 3.8V to capacitor for 1000 hours at 70℃ and measure the floating charge characteristics after returning to normal temperature and humidity.
6. Floating charge characteristics-2		Apply 3.5V to capacitor for 1000 hours at 85℃ and measure the floating charge characteristics after returning to normal temperature and humidity.
7. Heat cycle characteristics		Leave the capacitor in below condition, and measure the characteristics after returning to normal temperature and humidity. Temperature : 85±2℃, -40±2℃ Duration : 30min Cycle Numbers : 100cycles
8. Floating Charge Characteristics in high temperature and high humidity	No exterior abnormality observed. Initial spec. values retained.	Apply 3.8V 90%Rh to capacitor for 500 hours at 60℃ and measure the floating charge characteristics after returning to normal temperature and humidity.
9. Shock resistance		According to JIS C 60068-2-27 Half-sine wave A=294
10. Vibration resistance		Apply a sine wave vibration of 1.5mm amplitude and frequency 10 ~55Hz, for 2hours per each direction (X,Y and Z), total 6 hours.

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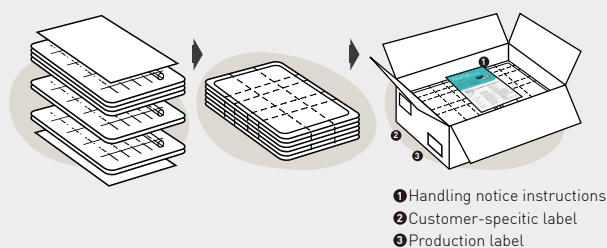


Part number	Dimension (mm)			
	ØD(±0.5)	L(±2)	Ød(±0.05)	F(±0.5)
VLCRS3R8206MG	Ø10.0	30	Ø0.6	5.0
VLCRS3R8406MG	Ø12.5	35	Ø0.8	5.0
VLCRS3R8107MG	Ø18.0	40	Ø0.8	7.5
VLCRS3R8277MG	Ø25.0	40	Ø1.0	12.5

Specifications

Part Number	Operating temp. range [°C]	Maximum available voltage [V]	Minimum available voltage [V]	Initial capacitance [F]	Initial DCR [mΩ]	Temperature characteristics			
						-30°C		+70°C/+85°C	
						Capacitance [F]	DCR [mΩ]	Capacitance [F]	DCR [mΩ]
VLCRS3R8206MG	-30 ~ +70 (Over +70 ~ +85)	3.8 (3.5)	2.2 (2.5)	20 ± 15%	Under 250	10	4000	Within initial spec. ※ Charging voltage is 3.5V when above 70°C	
VLCRS3R8406MG				40 ± 15%	Under 125	20	2000		
VLCRS3R8107MG				100 ± 15%	Under 60	51	1000		
VLCRS3R8277MG				270 ± 15%	Under 60	115	1000		

Packing configuration



Part number	Tray	Package	Out box	Size(mm)		
				W	L	H
VLCRS3R8206MG	20	100	400	330	450	250
VLCRS3R8406MG	20	100	400	330	450	250
VLCRS3R8107MG	20	100	400	350	530	250
VLCRS3R8277MG	20	100	400	350	600	330