

# DSK-414 ELECTRIC DOUBLE LAYER CAPACITORS "DYNACAP"

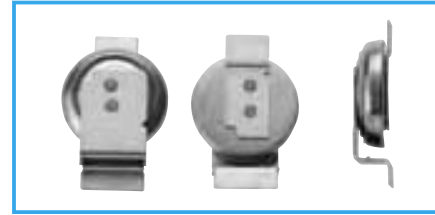
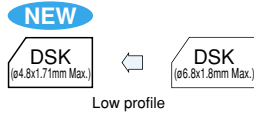
ELNA®

ø4.8 x 1.71mm Max. height Coin Cell Capacitors

GREEN CAP

70°C

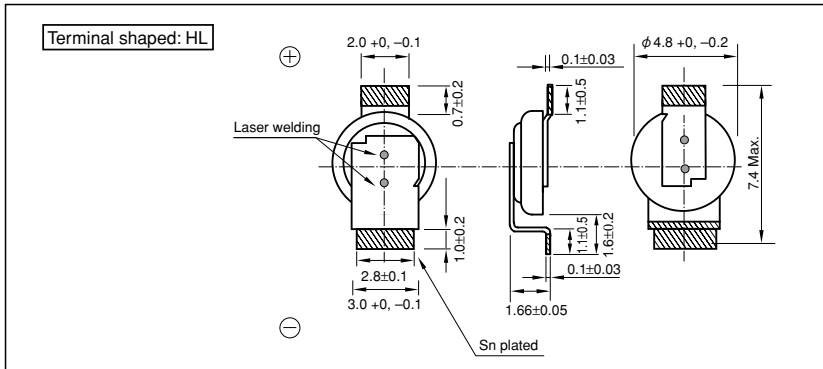
- Reflow soldering method available.
- Unlike batteries, the number of charging/ discharging cycles unlimited and rapid charging/ discharging is possible.
- High reliability, Safe and unlike secondary batteries, this is pollution free devices.
- ø4.8 x 1.71mm Max height type made lineup in the DSK series.



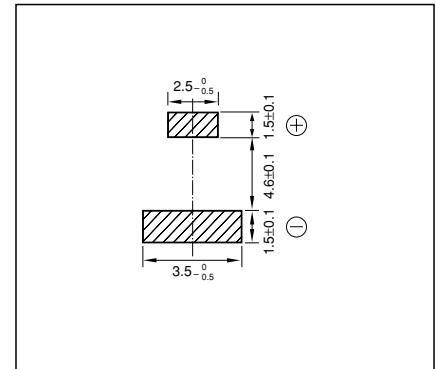
## Specifications

Item	Performance	
Series Name	DSK series	
Rated voltage (V)	3.3	
Category temperature range (°C)	-10 to +70	
Tolerance at rated capacitance (%)	-20 to +80	
Rated Capacitance (F)	0.07	
Internal resistance(Ω) at 1 kHz	100	
Characteristics at high and low temperature	Percentage of capacitance change	Within ±50% of the value at 20°C
	Internal resistance	Within ten times the initial specified value
Endurance	Test temperature	70°C
	Test time	500 hours
	Percentage of capacitance change	Within ±30% of the initial measured value
	Internal resistance	1.5kΩ or less
Shelf life	Test time :500 hours ; Same as endurance.	

## Outline Drawing



## Recommended land pattern size



## Part numbering system (3.3V0.07F, terminal shaped: HL)

DSK	—	3R3	H	703	T414	—	HL	L
Series code		Rated voltage symbol	Rated capacitance symbol	Additional symbol	Terminal shaped		Taping	

## Standard Ratings

Max. operating voltage(V)	Rated capacitance(F)	ELNA Parts No.	ø DxL(mm)
3.3	0.07	DSK-3R3H703T414-HLL	4.8x1.4

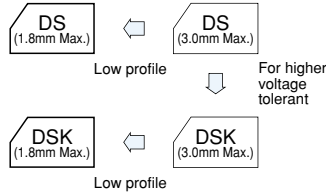
\* Reflow soldering condition : 146 page.

Electric Double Layer Capacitors

## 1.8mm Max. height Coin Cell Capacitors

GREEN CAP 60°C / 70°C

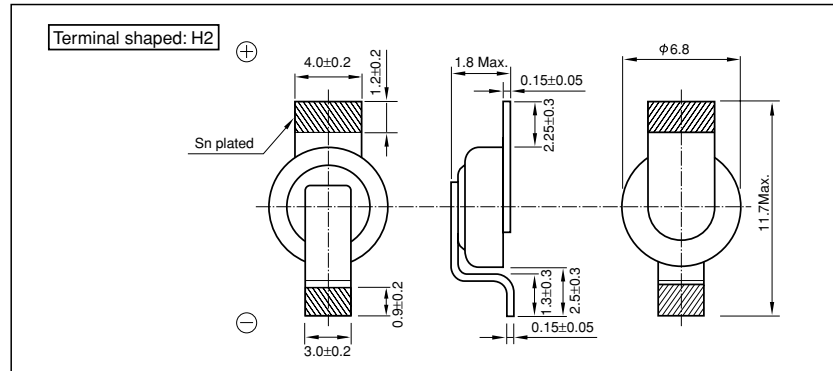
- Reflow soldering method available.
- Unlike batteries, the number of charging/ discharging cycles unlimited and rapid charging/ discharging is possible.
- High reliability, Safe and unlike secondary batteries, this is pollution free devices.
- 1.8mm height type made lineup in the DS, DSK series.



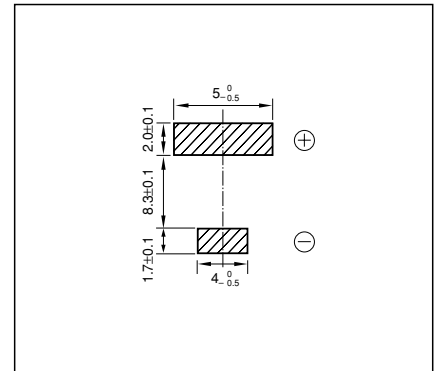
### Specifications

Item	Performance			
Series Name	DS series		DSK series	
Rated voltage (V)	2.5		3.3	
Category temperature range (°C)	-25 to +70		-10 to +60	
Tolerance at rated capacitance (%)	-20 to +80		-20 to +80	
Rated Capacitance (F)	0.2		0.2	
Internal resistance(Ω) at 1 kHz	100		200	
Characteristics at high and low temperature	Percentage of capacitance change	Within ±30% of the value at 20°C	Percentage of capacitance change	Within ±50% of the value at 20°C
	Internal resistance	Less than five times of the value at 20°C	Internal resistance	Within ten times the initial specified value
Endurance	Test temperature	70°C	Test temperature	60°C
	Test time	1000 hours	Test time	1000 hours
	Percentage of capacitance change	Within ±30% of the initial measured value	Percentage of capacitance change	Within ±30% of the initial measured value
	Internal resistance	2kΩ or less	Internal resistance	4kΩ or less
Shelf life	Test time :1000 hours ; Same as endurance.			

### Outline Drawing



### Recommended land pattern size



DS	—	2R5	H	204	T614	—	H2	L
Series code	Rated voltage symbol	Rated capacitance symbol	Additional symbol	Terminal shaped	Taping			

DSK	—	3R3	H	204	T614	—	H2	L
Series code	Rated voltage symbol	Rated capacitance symbol	Additional symbol	Terminal shaped	Taping			

### Standard Ratings

Max. operating voltage(V)	Rated capacitance(F)	ELNA Parts No.	φ DxL(mm)
2.5	0.2	DS-2R5H204T614-H2L	6.8x1.4
3.3	0.2	DSK-3R3H204T614-H2L	6.8x1.4

\* Reflow soldering condition : 146 page.

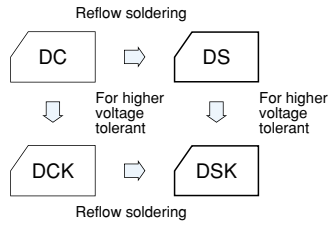
# DS, DSK-621 ELECTRIC DOUBLE LAYER CAPACITORS "DYNACAP"

ELNA®

## Coin Cell Capacitors

GREEN CAP 60°C / 70°C

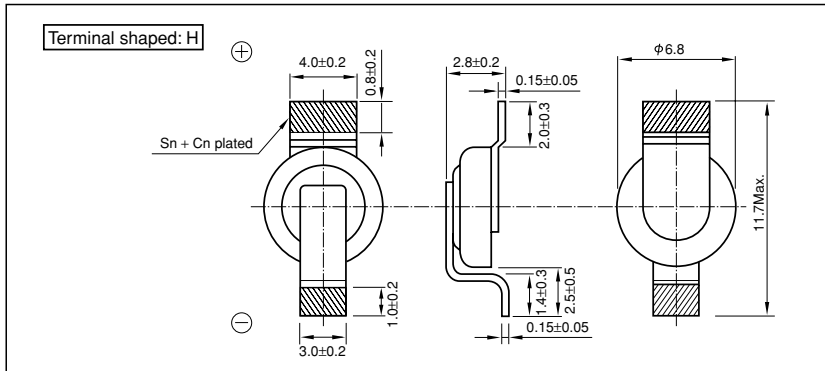
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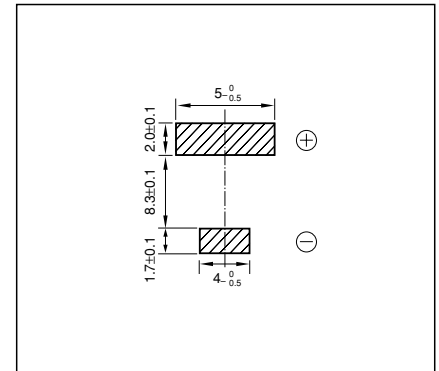
### Specifications

Item	Performance			
	DS series		DSK series	
Series Name	DS series		DSK series	
Rated voltage (V)	2.5		3.3	
Category temperature range (°C)	-25 to +70		-10 to +60	
Tolerance at rated capacitance (%)	-20 to +80		-20 to +80	
Rated Capacitance (F)	0.22		0.22	
Internal resistance(Ω) at 1 kHz	100		200	
Characteristics at high and low temperature	Percentage of capacitance change	Within ±30% of the value at 20°C	Percentage of capacitance change	Within ±50% of the value at 20°C
	Internal resistance	Less than five times of the value at 20°C	Internal resistance	Within five times the initial specified value
Endurance	Test temperature	70°C	Test temperature	60°C
	Test time	1000 hours	Test time	1000 hours
	Percentage of capacitance change	Within ±30% of the initial measured value	Percentage of capacitance change	Within ±30% of the initial measured value
	Internal resistance	Within four times of the initial specified value	Internal resistance	Within four times of the initial specified value
Shelf life	Test time :1000 hours ; Same as endurance.			

### Outline Drawing



### Recommended land pattern size



Part numbering system (2.5V0.22F, terminal shaped: H)

DS	—	2R5	H	224	□	—	HL
Series code		Rated voltage symbol		Rated capacitance symbol	Additional symbol		

Part numbering system (3.3V0.22F, terminal shaped: H)

DSK	—	3R3	H	224	□	—	HL
Series code		Rated voltage symbol		Rated capacitance symbol	Additional symbol		

### Standard Ratings

Max. operating voltage(V)	Rated capacitance(F)	ELNA Parts No.	φ DxDL(mm)
2.5	0.22	DS-2R5H224U-HL	6.8x2.1
3.3	0.22	DSK-3R3H224U-HL	6.8x2.1

\* Reflow soldering condition : 146 page.

Electric Double Layer Capacitors