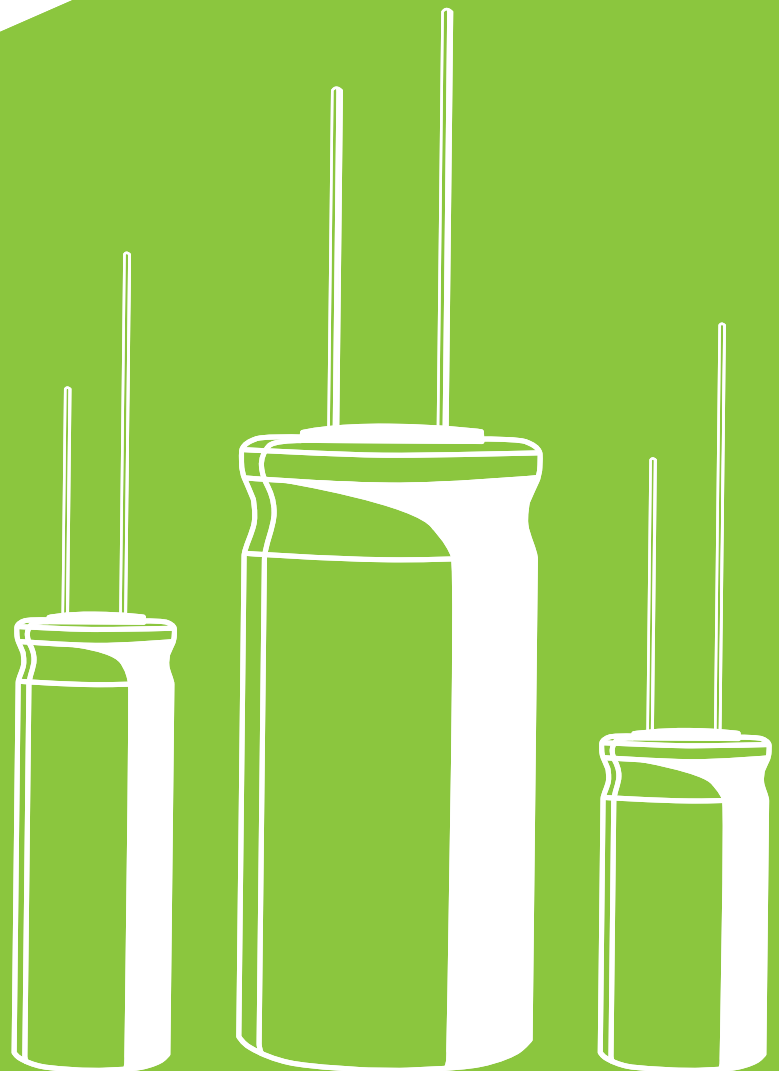




# PURIXEL

Purechem Co.,Ltd. Company Report



# PURIXEL PACKING

## Radial Type Packing

FIGURE 1  
Radial type(vinyl bag)

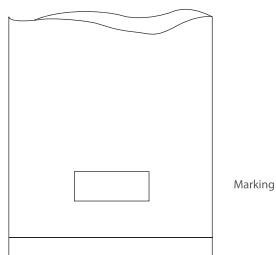


FIGURE 2  
Radial type(Inner box)

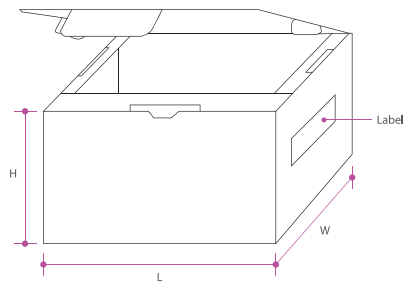
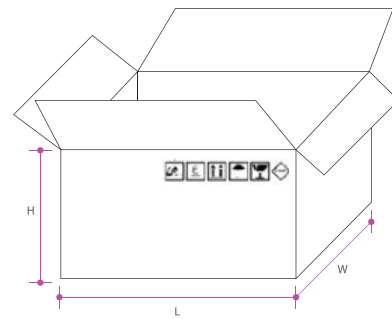


FIGURE 3  
Radial type(Middle box)



## Dimension(Middle box)

| ΦD × L         | Width | Height | Height | Q'ty(pcs) |
|----------------|-------|--------|--------|-----------|
| 08x20          | 470   | 300    | 305    | 9,600     |
| 10x20          | 470   | 300    | 305    | 6,400     |
| 10x30          | 470   | 300    | 305    | 4,800     |
| 12.5x25        | 470   | 300    | 305    | 4,000     |
| 16x25          | 470   | 300    | 305    | 2,000     |
| 18x32          | 470   | 300    | 305    | 1,600     |
| 18x40          | 470   | 300    | 305    | 1,200     |
| 22x45          | 470   | 300    | 305    | 600       |
| 08x20 (module) | 470   | 300    | 305    | 4,800     |
| 10x20 (module) | 470   | 300    | 305    | 3,200     |
| 10x30 (module) | 470   | 300    | 305    | 2,000     |

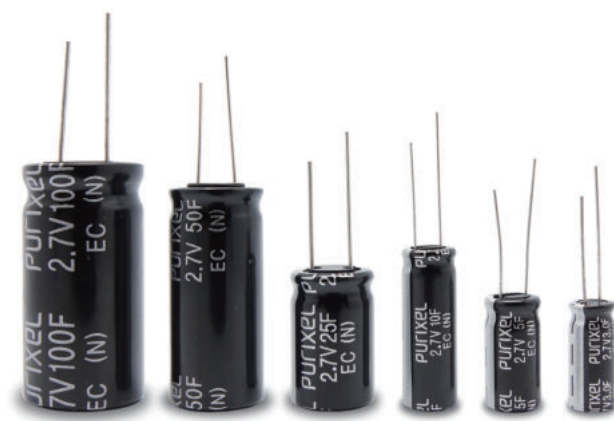


# PEC

Radial Type  
Standard Series

## Features

- Endurance : 2.7V 65°C 1500 hours
- Small size, high capacitance and low resistance
- Longer cycle life than other secondary batteries



## Characteristics

|  |   |   |
|--|---|---|
| <b>Operating Temperature Range</b>       | -40 ~ +65°C                                     |   |
| <b>Rated Voltage</b>                     | 2.7VDC  |   |
| <b>Capacitance Tolerance</b>             | -10 ~ +20%                                      |   |
| <b>Temperature Characteristics</b>       | Capacitance change                              | Within ± 5% of initial value at +25°C   |
|  | Internal resistance                             | Within ± 50% of initial value at +25°C  |
| <b>Endurance</b>                         | Duration  | 1500 hours  |
|  | Capacitance change                              | Within ≤ 30 % of initial value  |
|  | Internal resistance                             | Within ≤ 100 % of initial specified value   |
| <b>Shelf Life</b>                        | After 1500 hours no load test same as endurance |   |
| <b>Life Time at RT<sup>(1)</sup></b>     | 10 years  | (1) $ \Delta C  \leq 30\%$ of initial value and $ \Delta ESR  \leq 100\%$ initial specified value |
| <b>Cycle Life(25°C)<sup>(1)(2)</sup></b> | 500,000 cycles                                  | (2) Cycle : between rated voltage and half rated voltage under constant current at 25°C           |

## Applications

Remote Control  
Self Charge

Wireless & Setop Box  
Back up

Notebook & Tablet PC  
Memory Backup

Electronic Device & Tools  
Back up Power  
Stand

Black Box & Car Audio  
Recorder  
Battery Assist

Power Saving SMPS

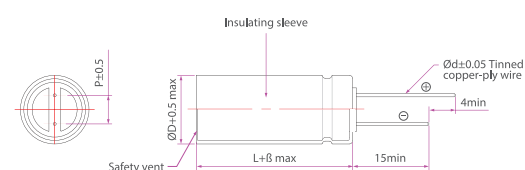
Copy Machine  
Heating Backup

Digital Camera

## Dimensions

unit(mm)

| ØD   | P    | d   | β   |
|------|------|-----|-----|
| 8    | 3.5  | 0.6 | 1.5 |
| 10   | 5.0  | 0.6 |     |
| 12.5 | 5.0  | 0.6 | 2.0 |
| 16   | 7.5  | 0.8 |     |
| 18   | 7.5  | 0.8 |     |
| 22   | 10.0 | 1.0 | 3.0 |



## Specifications

| Rated Voltage (V) | Capacitance (F) | ESR, 1kHz (mΩ) | ESR, DC (mΩ) | LC (72hr) (mA Max.) | Specific Energy (Wh/kg) | Specific Power (kW/kg) | Max. Peak Current (A) | Weight (g) | Volume (mL) | Dimension(mm) D x L | PART No.          |
|-------------------|-----------------|----------------|--------------|---------------------|-------------------------|------------------------|-----------------------|------------|-------------|---------------------|-------------------|
| 2.7V              | 3               | 45             | 70           | 0.007               | 2.17                    | 18.60                  | 3.35                  | 1.40       | 1.00        | 8 x 20              | PEC02R7SN30508020 |
|                   | 5               | 40             | 45           | 0.010               | 2.41                    | 19.29                  | 5.51                  | 2.10       | 1.57        | 10 x 20             | PEC02R7SN50510020 |
|                   | 10              | 25             | 40           | 0.023               | 3.07                    | 13.81                  | 9.64                  | 3.30       | 2.36        | 10 x 30             | PEC02R7SN10610030 |
|                   | 15              | 20             | 35           | 0.030               | 3.38                    | 11.57                  | 13.28                 | 4.50       | 3.07        | 12.5 x 25           | PEC02R7SN15612525 |
|                   | 25              | 15             | 25           | 0.045               | 3.47                    | 9.99                   | 20.77                 | 7.30       | 5.02        | 16 x 25             | PEC02R7SN25616025 |
|                   | 33              | 13             | 20           | 0.060               | 3.34                    | 9.11                   | 26.84                 | 10.00      | 8.14        | 18 x 32             | PEC02R7SN33618032 |
|                   | 50              | 9              | 15           | 0.075               | 3.89                    | 9.35                   | 38.57                 | 13.00      | 10.17       | 18 x 40             | PEC02R7SN50618040 |
|                   | 100             | 8              | 13           | 0.180               | 4.82                    | 6.68                   | 58.70                 | 21.00      | 17.10       | 22 x 45             | PEC02R7SN10722045 |

## Part Number

PEC

Series Code

02R7

Voltage, Terminal Symbol

S

Cell type

N

Class

305

Cap. Symbol

08020

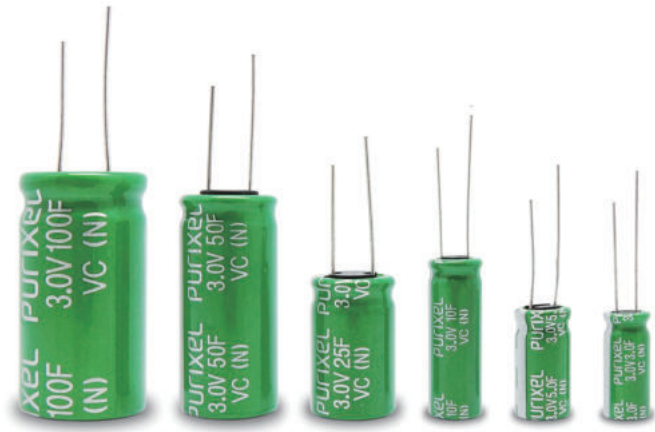
D Size x L Size

# PVC

Radial Type  
Standard Series

## Features

- Endurance : 3.0V 65°C 1000 hours
- Small size, high capacitance and low resistance
- Longer cycle life than other secondary batteries



## Characteristics

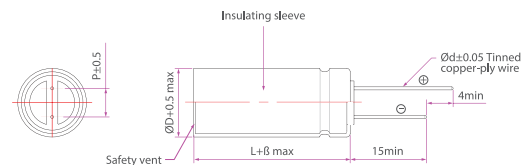
|                                    |   |   |
|------------------------------------|---|---|
| Operating Temperature Range        | -40 ~ +65°C                                     |   |
| Rated Voltage                      | 3.0 VDC   |   |
| Capacitance Tolerance              | -10 ~ +20%                                      |   |
| Temperature Characteristics        | Capacitance change                              | Within ± 5% of initial value at +25°C   |
|                                    | Internal resistance                             | Within ± 50% of initial value at +25°C  |
| Endurance                          | Duration  | 1000 hours  |
|                                    | Capacitance change                              | Within ≤ 30 % of initial value  |
|                                    | Internal resistance                             | Within ≤ 100 % of initial specified value   |
| Shelf Life                         | After 1000 hours no load test same as endurance |   |
| Life Time at RT <sup>(1)</sup>     | 10 years  | (1)  ΔC  ≤ 30% of initial value and  ΔESR  ≤ 100% initial specified value               |
| Cycle Life(25°C) <sup>(1)(2)</sup> | 500,000 cycles                                  | (2) Cycle : between rated voltage and half rated voltage under constant current at 25°C |

## Applications

- Remote Control Self Charge
- Wireless & Setop Box Back up
- Notebook & Tablet PC Memory Backup
- Electronic Device & Tools Back up Power Stand
- Black Box & Car Audio Recorder Battery Assist
- Power Saving SMPS
- Copy Machine Heating Backup
- Digital Camera

## Dimensions

| unit(mm) |      |     |     |
|----------|------|-----|-----|
| ∅D       | P    | d   | β   |
| 8        | 3.5  | 0.6 | 1.5 |
| 10       | 5.0  | 0.6 | 2.0 |
| 12.5     | 5.0  | 0.6 |     |
| 16       | 7.5  | 0.8 |     |
| 18       | 7.5  | 0.8 | 3.0 |
| 22       | 10.0 | 1.0 |     |



## Specifications

| Rated Voltage (V) | Capacitance (F) | ESR, 1kHz (mΩ) | ESR, DC (mΩ) | LC (72hr) (mA Max.) | Specific Energy (Wh/kg) | Specific Power (kW/kg) | Max. Peak Current (A) | Weight (g) | Volume (mL) | Dimension(mm) D x L | PART No.          |
|-------------------|-----------------|----------------|--------------|---------------------|-------------------------|------------------------|-----------------------|------------|-------------|---------------------|-------------------|
| 3.0V              | 3               | 45             | 70           | 0.010               | 2.34                    | 20.09                  | 3.72                  | 1.60       | 1.00        | 8 x 20              | PVC03R0SN30508020 |
|                   | 5               | 40             | 45           | 0.015               | 2.72                    | 21.74                  | 6.12                  | 2.30       | 1.57        | 10 x 20             | PVC03R0SN50510020 |
|                   | 10              | 25             | 40           | 0.030               | 3.57                    | 16.07                  | 10.71                 | 3.50       | 2.36        | 10 x 30             | PVC03R0SN10610030 |
|                   | 15              | 20             | 35           | 0.050               | 4.17                    | 14.29                  | 14.75                 | 4.50       | 3.07        | 12.5 x 25           | PVC03R0SN15612525 |
|                   | 25              | 15             | 25           | 0.070               | 4.17                    | 12.00                  | 23.08                 | 7.50       | 5.02        | 16 x 25             | PVC03R0SN25616025 |
|                   | 33              | 13             | 20           | 0.100               | 4.08                    | 11.14                  | 29.82                 | 10.10      | 8.14        | 18 x 32             | PVC03R0SN33618032 |
|                   | 50              | 10             | 15           | 0.150               | 4.63                    | 11.11                  | 42.86                 | 13.50      | 10.17       | 18 x 40             | PVC03R0SN50618040 |
|                   | 100             | 8              | 13           | 0.300               | 5.95                    | 8.24                   | 65.22                 | 21.00      | 17.10       | 22 x 45             | PVC03R0SN10722045 |

## Part Number

PVC

Series Code

03R0

Voltage, Terminal Symbol

S

Cell type

N

Class

305

Cap. Symbol

08020

D Size x L Size

# PTC

Radial Type  
Standard Series

## Features

- Endurance : 2.7V 85°C 1000 hours
- Small size, high capacitance and low resistance
- Longer cycle life than other secondary batteries



## Characteristics

|  |   |  |
|--|---|--|
| <b>Operating Temperature Range</b>       | -40 ~ +85°C                                     |  |
| <b>Rated Voltage</b>                     | 2.7 VDC   |  |
| <b>Capacitance Tolerance</b>             | -10 ~ +20%                                      |  |
| <b>Temperature Characteristics</b>       | Capacitance change                              | Within ± 5% of initial value at +25°C  |
|  | Internal resistance                             | Within ± 50% of initial value at +25°C   |
| <b>Endurance</b>                         | Duration  | 1000 hours   |
|  | Capacitance change                              | Within ≤ 30 % of initial value   |
|  | Internal resistance                             | Within ≤ 200 % of initial specified value  |
| <b>Shelf Life</b>                        | After 1000 hours no load test same as endurance |  |
| <b>Life Time at RT<sup>(1)</sup></b>     | 10 years  | (1) $ \Delta C  \leq 30\%$ of initial value and $ \Delta ESR  \leq 200\%$ of initial specified value |
| <b>Cycle Life(25°C)<sup>(1)(2)</sup></b> | 500,000 cycles                                  | (2) Cycle : between rated voltage and half rated voltage under constant current at 25°C              |

## Applications

Remote Control  
Self Charge

Wireless & Setop Box  
Back up

Notebook & Tablet PC  
Memory Backup

Electronic Device & Tools  
Back up Power  
Stand

Black Box & Car Audio  
Recorder  
Battery Assist

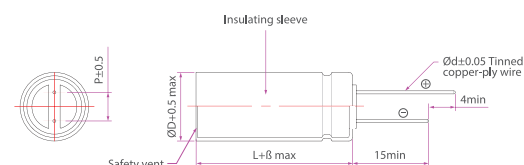
Power Saving SMPS

Copy Machine  
Heating Backup

Digital Camera

## Dimensions

| unit(mm) |      |     |     |
|----------|------|-----|-----|
| ØD       | P    | d   | β   |
| 8        | 3.5  | 0.6 | 1.5 |
| 10       | 5.0  | 0.6 |     |
| 12.5     | 5.0  | 0.6 | 2.0 |
| 16       | 7.5  | 0.8 |     |
| 18       | 7.5  | 0.8 |     |
| 22       | 10.0 | 1.0 | 3.0 |



## Specifications

| Rated Voltage (V) | Capacitance (F) | ESR, 1kHz (mΩ) | ESR, DC (mΩ) | LC (72hr) (mA Max.) | Specific Energy (Wh/kg) | Specific Power (kW/kg) | Max. Peak Current (A) | Weight (g) | Volume (mL) | Dimension(mm) D x L | PART No.          |
|-------------------|-----------------|----------------|--------------|---------------------|-------------------------|------------------------|-----------------------|------------|-------------|---------------------|-------------------|
| 2.7V              | 3               | 45             | 70           | 0.010               | 1.90                    | 16.27                  | 3.35                  | 1.60       | 1.00        | 8 x 20              | PTC02R7SN30508020 |
|                   | 5               | 40             | 45           | 0.015               | 2.20                    | 17.61                  | 5.51                  | 2.30       | 1.57        | 10 x 20             | PTC02R7SN50510020 |
|                   | 10              | 25             | 40           | 0.030               | 2.89                    | 13.02                  | 9.64                  | 3.50       | 2.36        | 10 x 30             | PTC02R7SN10610030 |
|                   | 15              | 20             | 35           | 0.050               | 3.38                    | 11.57                  | 13.28                 | 4.50       | 3.07        | 12.5 x 25           | PTC02R7SN15612525 |
|                   | 25              | 15             | 25           | 0.070               | 3.38                    | 9.72                   | 20.77                 | 7.50       | 5.02        | 16 x 25             | PTC02R7SN25616025 |
|                   | 33              | 13             | 20           | 0.100               | 3.31                    | 9.02                   | 26.84                 | 10.10      | 8.14        | 18 x 32             | PTC02R7SN33618032 |
|                   | 50              | 10             | 15           | 0.150               | 3.75                    | 9.00                   | 38.57                 | 13.50      | 10.17       | 18 x 40             | PTC02R7SN50618040 |
|                   | 100             | 8              | 13           | 0.300               | 4.82                    | 6.68                   | 58.70                 | 21.00      | 17.10       | 22 x 45             | PTC02R7SN10722045 |

## Part Number

P T C

Series Code

0 2 R 7

Voltage, Terminal Symbol

S

Cell type

N

Class

3 0 5

Cap. Symbol

0 8 0 2 0

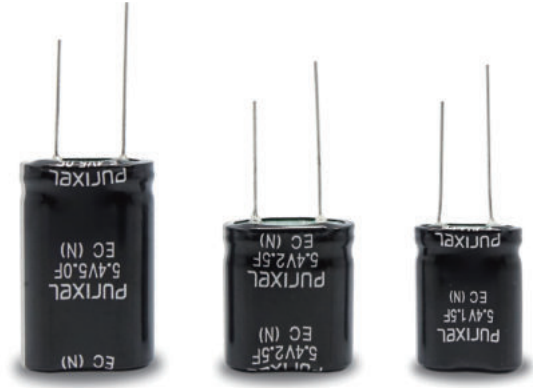
D Size x L Size

# PEC

Module Type  
Standard Series

## Features

- Endurance : 5.4V 65°C 1500 hours
- Small size, high capacitance and low resistance
- Longer cycle life than other secondary batteries



## Characteristics

|                                    |   |   |
|------------------------------------|---|---|
| Operating Temperature Range        | -40 ~ +65°C                                     |   |
| Rated Voltage                      | 5.4 VDC   |   |
| Capacitance Tolerance              | -10 ~ +20%                                      |   |
| Temperature Characteristics        | Capacitance change                              | Within ± 5% of initial value at +25°C   |
|                                    | Internal resistance                             | Within ± 50% of initial value at +25°C  |
| Endurance                          | Duration  | 1500 hours  |
|                                    | Capacitance change                              | Within ≤ 30 % of initial value  |
|                                    | Internal resistance                             | Within ≤ 100 % of initial specified value   |
| Shelf Life                         | After 1500 hours no load test same as endurance |   |
| Life Time at RT <sup>(1)</sup>     | 10 years  | (1)  ΔC ≤30% of initial value and  ΔESR ≤100% initial specified value                   |
| Cycle Life(25°C) <sup>(1)(2)</sup> | 500,000 cycles                                  | (2) Cycle : between rated voltage and half rated voltage under constant current at 25°C |

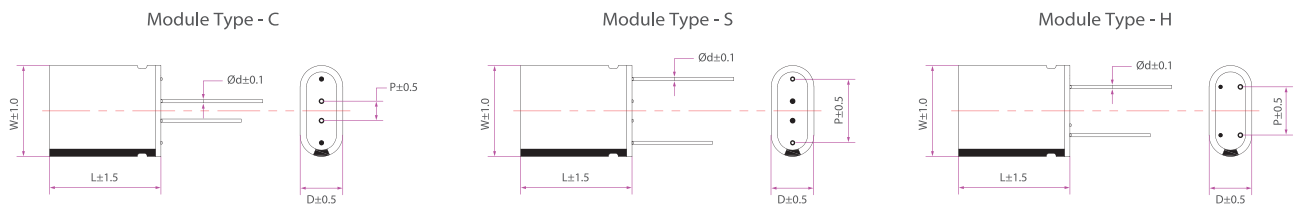
## Applications

- Remote Control Self Charge
- Wireless & Setop Box Back up
- Notebook & Tablet PC Memory Backup
- Electronic Device & Tools Back up Power Stand
- Black Box & Car Audio Recorder Battery Assist
- Power Saving SMPS
- Copy Machine Heating Backup
- Digital Camera

## Dimensions

unit(mm)

| Type C | P      |        | Ød  | Single Cell Size<br>ØD x L |
|--------|--------|--------|-----|----------------------------|
|        | Type S | Type H |     |                            |
| 4.9    | 12.2   | 8.5    | 0.6 | 8 x 20                     |
| 5.5    | 15.5   | 10.5   | 0.6 | 10 x 20                    |
| 5.5    | 15.5   | 10.5   | 0.6 | 10 x 30                    |



## Specifications

| Rated Voltage (V) | Capacitance (F) | ESR, 1kHz (mΩ) | ESR, DC (mΩ) | LC (72hr) (mA Max.) | Specific Energy (Wh/kg) | Specific Power (kW/kg) | Max. Peak Current (A) | Weight (g) | Dimension(mm) L x W x D | PART No.          |
|-------------------|-----------------|----------------|--------------|---------------------|-------------------------|------------------------|-----------------------|------------|-------------------------|-------------------|
| 5.4V              | 1.5             | 90             | 140          | 0.015               | 1.79                    | 15.32                  | 3.35                  | 3.40       | 22.0 x 17.0 x 8.5       | PEC05H4MN15508020 |
|                   | 2.5             | 80             | 90           | 0.020               | 2.03                    | 16.20                  | 5.51                  | 5.00       | 22.0 x 21.0 x 10.5      | PEC05H4MN25510020 |
|                   | 5.0             | 50             | 80           | 0.046               | 2.89                    | 13.02                  | 9.64                  | 7.00       | 32.0 x 21.0 x 10.5      | PEC05H4MN50510030 |

## Part Number

PEC

Series Code

05H4

Voltage, Terminal Symbol

M

Cell type

N

Class

155

Cap. Symbol

08020

D Size x L Size

# PVC

Module Type  
Standard Series

## Features

- Endurance : 6.0V 65°C 1000 hours
- Small size, high capacitance and low resistance
- Longer cycle life than other secondary batteries



## Characteristics

|                                    |   |   |
|------------------------------------|---|---|
| Operating Temperature Range        | -40 ~ +65°C                                     |   |
| Rated Voltage                      | 6.0 VDC   |   |
| Capacitance Tolerance              | -10 ~ +20%                                      |   |
| Temperature Characteristics        | Capacitance change                              | Within ± 5% of initial value at +25°C   |
|                                    | Internal resistance                             | Within ± 50% of initial value at +25°C  |
| Endurance                          | Duration  | 1000 hours  |
|                                    | Capacitance change                              | Within ≤ 30 % of initial value  |
|                                    | Internal resistance                             | Within ≤ 100 % of initial specified value   |
| Shelf Life                         | After 1000 hours no load test same as endurance |   |
| Life Time at RT <sup>(1)</sup>     | 10 years  | (1)  ΔC ≤30% of initial value and  ΔESR ≤100% initial specified value                   |
| Cycle Life(25°C) <sup>(1)(2)</sup> | 500,000 cycles                                  | (2) Cycle : between rated voltage and half rated voltage under constant current at 25°C |

## Applications

Remote Control  
Self Charge

Wireless & Setop Box  
Back up

Notebook & Tablet PC  
Memory Backup

Electronic Device & Tools  
Back up Power  
Stand

Black Box & Car Audio  
Recorder  
Battery Assist

Power Saving SMPS

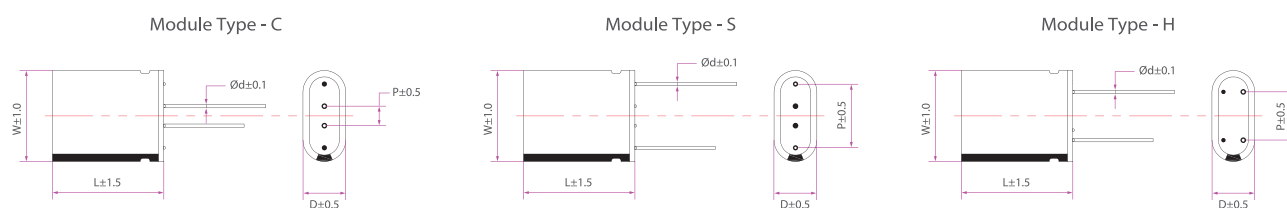
Copy Machine  
Heating Backup

Digital Camera

## Dimensions

unit(mm)

| Type C | P      |        | Ød  | Single Cell Size<br>ØD x L |
|--------|--------|--------|-----|----------------------------|
|        | Type S | Type H |     |                            |
| 4.9    | 12.2   | 8.5    | 0.6 | 8 x 20                     |
| 5.5    | 15.5   | 10.5   | 0.6 | 10 x 20                    |
| 5.5    | 15.5   | 10.5   | 0.6 | 10 x 30                    |



## Specifications

| Rated Voltage (V) | Capacitance (F) | ESR, 1kHz (mΩ) | ESR, DC (mΩ) | LC (72hr) (mA Max.) | Specific Energy (Wh/kg) | Specific Power (kW/kg) | Max. Peak Current (A) | Weight (g) | Dimension(mm) L x W x D | PART No.          |
|-------------------|-----------------|----------------|--------------|---------------------|-------------------------|------------------------|-----------------------|------------|-------------------------|-------------------|
| 6.0V              | 1.5             | 90             | 140          | 0.015               | 2.21                    | 18.91                  | 3.72                  | 3.40       | 22.0 x 16.0 x 8.5       | PVC06H0MN15508020 |
|                   | 2.5             | 80             | 90           | 0.020               | 2.50                    | 20.00                  | 6.12                  | 5.00       | 22.0 x 21.0 x 10.5      | PVC06H0MN25510020 |
|                   | 5.0             | 50             | 80           | 0.060               | 3.57                    | 16.07                  | 10.71                 | 7.00       | 32.0 x 21.0 x 10.5      | PVC06H0MN50510030 |

## Part Number

P V C

Series Code

0 6 H 0

Voltage, Terminal Symbol

M

Cell type

N

Class

1 5 5

Cap. Symbol

0 8 0 2 0

D Size x L Size



**Purechem Co.,Ltd.**

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