

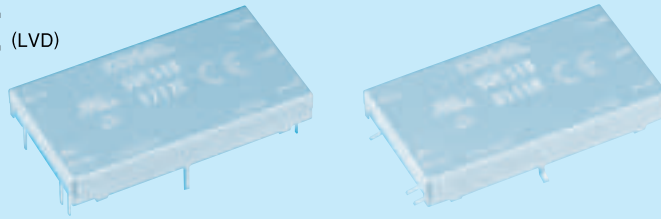
COSEL

On-board type

Ordering information

SUCS10

SUC S 10 12 05 B P - ☐



- ① Series name
- ② Single output
- ③ Output wattage
- ④ Input voltage
- ⑤ Output voltage
- ⑥ Mounting type  
B : SMD  
C : DIP
- ⑦ Packing form  
Blank: Plastic cover  
P : Pallet (SMD type)
- ⑧ Optional  
G : Capacitor between Input and Output is removed.

| MODEL                 | SUCS10053R3   | SUCS100505 | SUCS100512 | SUCS100515 | SUCS10123R3 | SUCS101205 | SUCS101212 | SUCS101215 |
|-----------------------|---------------|------------|------------|------------|-------------|------------|------------|------------|
| MAX OUTPUT WATTAGE[W] | 8.58          | 10         | 10.8       | 10.5       | 8.58        | 10         | 12         | 12         |
| DC OUTPUT             | VOLTAGE[V] *1 | 3.3        | 5          | 12         | 15          | 3.3        | 5          | 12         |
|                       | CURRENT[A]    | 2.6        | 2          | 0.9        | 0.7         | 2.6        | 2          | 1          |
|                       |               |            |            |            |             |            |            | 0.8        |

## SPECIFICATIONS

|                               | MODEL                      | SUCS10053R3                                          | SUCS100505  | SUCS100512    | SUCS100515    | SUCS10123R3 | SUCS101205  | SUCS101212    | SUCS101215    |
|-------------------------------|----------------------------|------------------------------------------------------|-------------|---------------|---------------|-------------|-------------|---------------|---------------|
| INPUT                         | VOLTAGE[V]                 | DC4.5 - 9                                            |             |               |               | DC9 - 18    |             |               |               |
|                               | CURRENT[A] *2              | 2.12typ                                              | 2.41typ     | 2.54typ       | 2.47typ       | 0.872typ    | 0.980typ    | 1.15typ       | 1.15typ       |
|                               | EFFICIENCY[%] *2           | 81typ                                                | 83typ       | 85typ         | 85typ         | 82typ       | 85typ       | 87typ         | 87typ         |
| OUTPUT                        | VOLTAGE[V]                 | 3.3                                                  | 5           | 12            | 15            | 3.3         | 5           | 12            | 15            |
|                               | CURRENT[A]                 | 2.6                                                  | 2           | 0.9           | 0.7           | 2.6         | 2           | 1             | 0.8           |
|                               | LINE REGULATION[mV]        | 20max                                                | 20max       | 48max         | 60max         | 20max       | 20max       | 48max         | 60max         |
|                               | LOAD REGULATION[mV]        | 40max                                                | 40max       | 100max        | 120max        | 40max       | 40max       | 100max        | 120max        |
|                               | RIPPLE[mVp-p]              | -20 to +55°C *3                                      | 80max       | 80max         | 120max        | 120max      | 80max       | 80max         | 120max        |
|                               |                            | -40 to -20°C *3                                      | 120max      | 120max        | 150max        | 150max      | 120max      | 120max        | 150max        |
|                               | RIPPLE NOISE[mVp-p]        | -20 to +55°C *3                                      | 120max      | 120max        | 150max        | 150max      | 120max      | 120max        | 150max        |
|                               |                            | -40 to -20°C *3                                      | 200max      | 200max        | 200max        | 200max      | 200max      | 200max        | 200max        |
|                               | TEMPERATURE REGULATION[mV] | -20 to +55°C                                         | 50max       | 50max         | 150max        | 180max      | 50max       | 50max         | 150max        |
|                               |                            | -40 to +55°C                                         | 80max       | 80max         | 240max        | 290max      | 80max       | 80max         | 240max        |
| PROTECTION CIRCUIT AND OTHERS | DRIFT[mV] *4               | 20max                                                | 20max       | 48max         | 60max         | 20max       | 20max       | 48max         | 60max         |
|                               | START-UP TIME[ms]          | 20max (Minimum input, Io=100%)                       |             |               |               |             |             |               |               |
|                               | VOLTAGE ADJUSTMENT RANGE   | Fixed (TRM pin open) ±5% adjustable by external VR   |             |               |               |             |             |               |               |
|                               | VOLTAGE SETTING[V] (±3%)   | 3.21 - 3.42                                          | 4.90 - 5.21 | 11.64 - 12.36 | 14.55 - 15.45 | 3.21 - 3.42 | 4.90 - 5.21 | 11.64 - 12.36 | 14.55 - 15.45 |
|                               | OVERCURRENT PROTECTION     | Works over 105% of rating and recovers automatically |             |               |               |             |             |               |               |
|                               | REMOTE ON/OFF              | Provided (Negative logic L : ON, H : OFF)            |             |               |               |             |             |               |               |

| MODEL                 | SUCS10243R3   | SUCS102405 | SUCS102412 | SUCS102415 | SUCS10483R3 | SUCS104805 | SUCS104812 | SUCS104815 |
|-----------------------|---------------|------------|------------|------------|-------------|------------|------------|------------|
| MAX OUTPUT WATTAGE[W] | 8.58          | 10         | 12         | 12         | 8.58        | 10         | 12         | 12         |
| DC OUTPUT             | VOLTAGE[V] *1 | 3.3        | 5          | 12         | 15          | 3.3        | 5          | 12         |
|                       | CURRENT[A]    | 2.6        | 2          | 1          | 0.8         | 2.6        | 2          | 1          |
|                       |               |            |            |            |             |            |            | 0.8        |

## SPECIFICATIONS

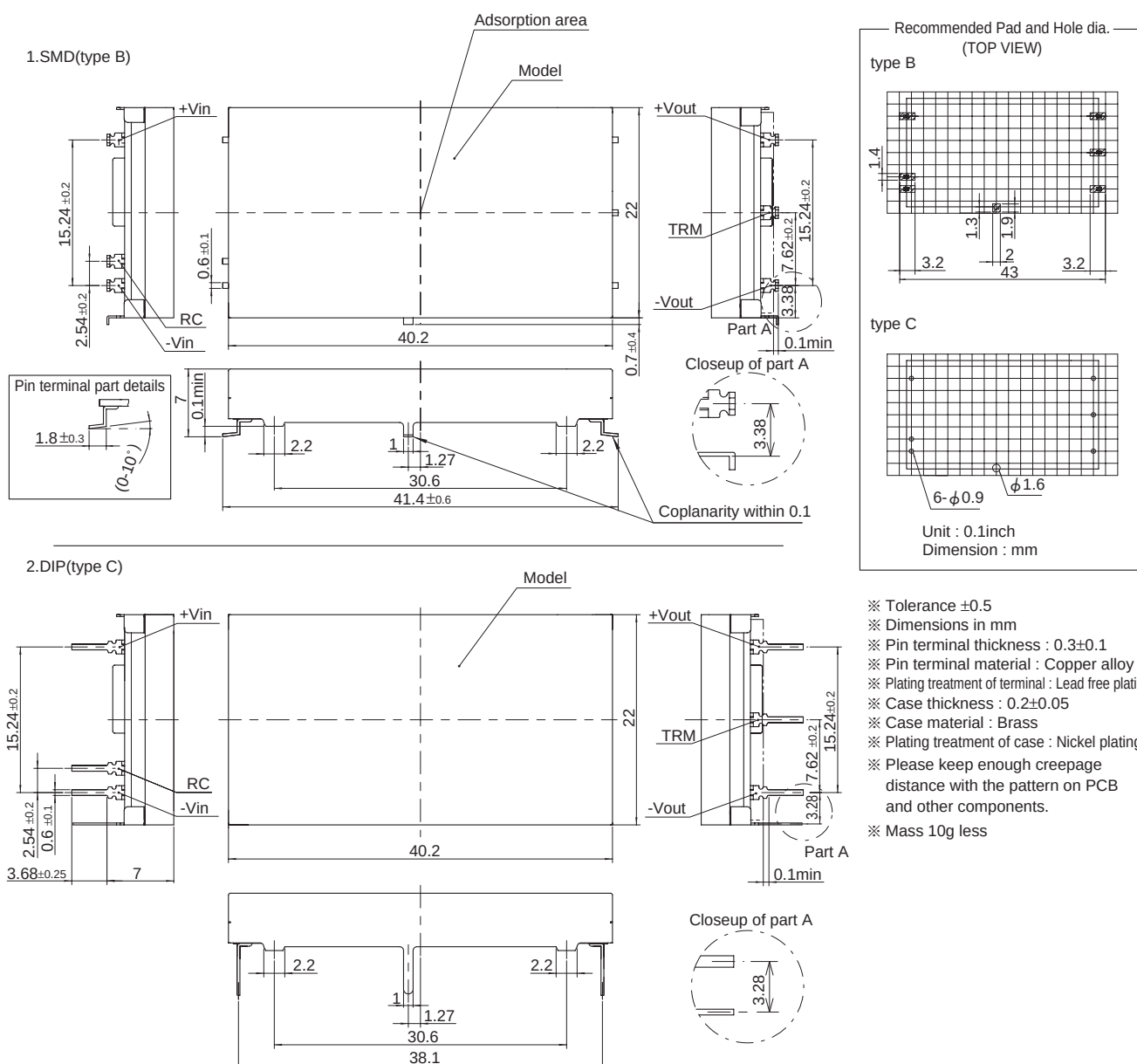
|                               | MODEL                      | SUCS10243R3                                          | SUCS102405  | SUCS102412    | SUCS102415    | SUCS10483R3 | SUCS104805  | SUCS104812    | SUCS104815    |
|-------------------------------|----------------------------|------------------------------------------------------|-------------|---------------|---------------|-------------|-------------|---------------|---------------|
| INPUT                         | VOLTAGE[V]                 | DC18 - 36                                            |             |               |               | DC36 - 76   |             |               |               |
|                               | CURRENT[A] *2              | 0.436typ                                             | 0.490typ    | 0.575typ      | 0.575typ      | 0.218typ    | 0.245typ    | 0.287typ      | 0.287typ      |
|                               | EFFICIENCY[%] *2           | 82typ                                                | 85typ       | 87typ         | 87typ         | 82typ       | 85typ       | 87typ         | 87typ         |
| OUTPUT                        | VOLTAGE[V]                 | 3.3                                                  | 5           | 12            | 15            | 3.3         | 5           | 12            | 15            |
|                               | CURRENT[A]                 | 2.6                                                  | 2           | 1             | 0.8           | 2.6         | 2           | 1             | 0.8           |
|                               | LINE REGULATION[mV]        | 20max                                                | 20max       | 48max         | 60max         | 20max       | 20max       | 48max         | 60max         |
|                               | LOAD REGULATION[mV]        | 40max                                                | 40max       | 100max        | 120max        | 40max       | 40max       | 100max        | 120max        |
|                               | RIPPLE[mVp-p]              | -20 to +55°C *3                                      | 80max       | 80max         | 120max        | 120max      | 80max       | 80max         | 120max        |
|                               |                            | -40 to -20°C *3                                      | 120max      | 120max        | 150max        | 150max      | 120max      | 120max        | 150max        |
|                               | RIPPLE NOISE[mVp-p]        | -20 to +55°C *3                                      | 120max      | 120max        | 150max        | 150max      | 120max      | 120max        | 150max        |
|                               |                            | -40 to -20°C *3                                      | 200max      | 200max        | 200max        | 200max      | 200max      | 200max        | 200max        |
|                               | TEMPERATURE REGULATION[mV] | -20 to +55°C                                         | 50max       | 50max         | 150max        | 180max      | 50max       | 50max         | 150max        |
|                               |                            | -40 to +55°C                                         | 80max       | 80max         | 240max        | 290max      | 80max       | 80max         | 240max        |
| PROTECTION CIRCUIT AND OTHERS | DRIFT[mV] *4               | 20max                                                | 20max       | 48max         | 60max         | 20max       | 20max       | 48max         | 60max         |
|                               | START-UP TIME[ms]          | 20max (Minimum input, Io=100%)                       |             |               |               |             |             |               |               |
|                               | VOLTAGE ADJUSTMENT RANGE   | Fixed (TRM pin open) ±5% adjustable by external VR   |             |               |               |             |             |               |               |
|                               | VOLTAGE SETTING[V] (±3%)   | 3.21 - 3.42                                          | 4.90 - 5.21 | 11.64 - 12.36 | 14.55 - 15.45 | 3.21 - 3.42 | 4.90 - 5.21 | 11.64 - 12.36 | 14.55 - 15.45 |
|                               | OVERCURRENT PROTECTION     | Works over 105% of rating and recovers automatically |             |               |               |             |             |               |               |
|                               | REMOTE ON/OFF              | Provided (Negative logic L : ON, H : OFF)            |             |               |               |             |             |               |               |

## GENERAL SPECIFICATIONS

|             |                                      |                                                                                                   |
|-------------|--------------------------------------|---------------------------------------------------------------------------------------------------|
| ISOLATION   | INPUT-OUTPUT                         | AC500V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (20 $\pm$ 15 $^{\circ}$ C)         |
|             | INPUT-CASE                           | AC500V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (20 $\pm$ 15 $^{\circ}$ C)         |
|             | OUTPUT-CASE                          | AC500V 1minute, Cutoff current = 10mA, DC500V 50M $\Omega$ min (20 $\pm$ 15 $^{\circ}$ C)         |
| ENVIRONMENT | OPERATING TEMP., HUMID. AND ALTITUDE | -40 to +85 $^{\circ}$ C, 20 - 95%RH (Non condensing) (Required Derating), 3,000m (10,000feet) max |
|             | STORAGE TEMP., HUMID. AND ALTITUDE   | -40 to +100 $^{\circ}$ C, 20 - 95%RH (Non condensing), 9,000m (30,000feet) max                    |
|             | VIBRATION                            | 10 - 55Hz, 98.0m/s $^2$ (10G), 3minutes period, 60minutes each along X, Y and Z axis              |
|             | IMPACT                               | 490.3m/s $^2$ (50G), 11ms, once each along X, Y and Z axis                                        |
| SAFETY      | AGENCY APPROVALS                     | UL60950-1, C-UL, EN60950-1                                                                        |
| OTHERS      | CASE SIZE/WEIGHT                     | 40.2 $\times$ 7.0 $\times$ 22.0mm (W $\times$ H $\times$ D) / 10g max                             |
|             | COOLING METHOD                       | Convection/Forced air                                                                             |

- \*1 SUCW10xx12/SUCW10xx15 is available as single output, +24V/+30V.
- \*2 Rated input 5V, 12V, 24V or 48V DC Io=100%
- \*3 Ripple and Ripple Noise is measured by using measuring board with capacitor with in 25mm from output pin terminals.
- \*4 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25 $^{\circ}$ C.
- \* Parallel operation with other model is not possible.

### External view



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Cosel:

[SUCS102415C](#) [SUCS100515B](#) [SUCS101205BP](#) [SUCS104805B](#) [SUCS101212B](#) [SUCS102412C](#) [SUCS10243R3B](#)  
[SUCS10483R3BP](#) [SUCS102415B](#) [SUCS101215C](#) [SUCS104815BP](#) [SUCS10483R3B](#) [SUCS104812C](#)  
[SUCS10123R3BP](#) [SUCS100515C](#) [SUCS104805C](#) [SUCS10243R3BP](#) [SUCS10123R3B](#) [SUCS100505B](#)  
[SUCS102415BP](#) [SUCS101215BP](#) [SUCS10053R3B](#) [SUCS100505BP](#) [SUCS104812B](#) [SUCS102412BP](#)  
[SUCS104812BP](#) [SUCS10243R3C](#) [SUCS101215B](#) [SUCS10483R3C](#) [SUCS101205B](#) [SUCS100512C](#) [SUCS101205C](#)  
[SUCS101212BP](#) [SUCS102405BP](#) [SUCS100512B](#) [SUCS102412B](#) [SUCS102405B](#) [SUCS10053R3BP](#)  
[SUCS104815B](#) [SUCS104815C](#) [SUCS10123R3C](#) [SUCS102405C](#) [SUCS10053R3C](#) [SUCS101212C](#) [SUCS100515BP](#)  
[SUCS104805BP](#) [SUCS100512BP](#)