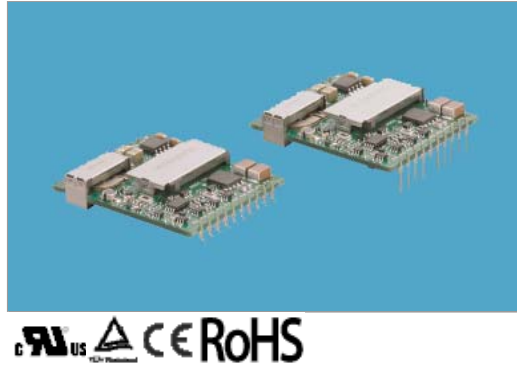


[Home](#) > Product Details

## SFS30



### Features

- High reliability : not built-in aluminum and tantalum electrolytic capacitor
- Built-in Remote ON/OFF
- Parallel operation
- SMD mounting type and through-hole mounting type
- High efficiency (synchronous rectifier circuit)
- Alarm
- Built-in Over Current Protection
- Built-in Over Voltage Protection
- Built-in Low Voltage Protection
- RoHS Compliant

### Safety Agency Approvals

UL60950-1, C-UL, EN60950-1

### CE Markings

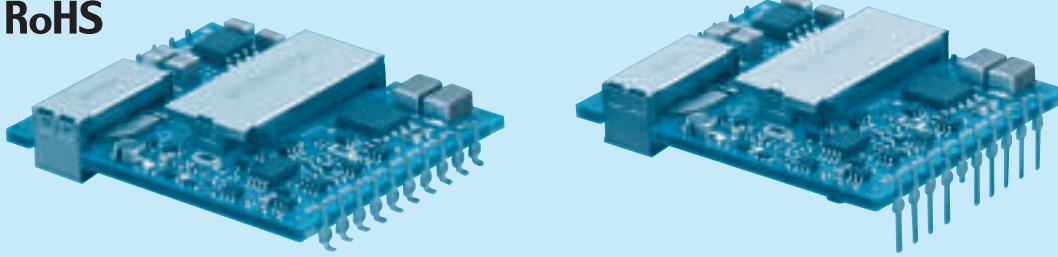
Low Voltage Directive

**5 year warranty(refer to Instruction Manual)**

| Model      | Input Voltage [V] | Output Wattage [W] | DC Output [V/A] |
|------------|-------------------|--------------------|-----------------|
| SFS30241R2 | DC 18 - 36        | 12.48              | 1.2V<br>10.4A   |
| SFS30241R5 | DC 18 - 36        | 15.6               | 1.5V<br>10.4A   |
| SFS30241R8 | DC 18 - 36        | 16.2               | 1.8V<br>9A      |
| SFS30242R5 | DC 18 - 36        | 22.5               | 2.5V<br>9A      |
| SFS30243R3 | DC 18 - 36        | 29.7               | 3.3V<br>9A      |
| SFS302405  | DC 18 - 36        | 30                 | 5V<br>6A        |
| SFS302412  | DC 18 - 36        | 30                 | 12V<br>2.5A     |
| SFS302415  | DC 18 - 36        | 30                 | 15V<br>2A       |
| SFS30481R2 | DC 36 - 76        | 12.48              | 1.2V<br>10.4A   |
| SFS30481R5 | DC 36 - 76        | 15.6               | 1.5V<br>10.4A   |
| SFS30481R8 | DC 36 - 76        | 16.2               | 1.8V<br>9A      |
| SFS304802  | DC 36 - 76        | 18                 | 2V<br>9A        |
| SFS30482R5 | DC 36 - 76        | 22.5               | 2.5V<br>9A      |
| SFS30483R3 | DC 36 - 76        | 29.7               | 3.3V<br>9A      |
| SFS304805  | DC 36 - 76        | 30                 | 5V<br>6A        |
| SFS304810  | DC 36 - 76        | 30                 | 10V<br>3A       |
| SFS304812  | DC 36 - 76        | 30                 | 12V<br>2.5A     |
| SFS304815  | DC 36 - 76        | 30                 | 15V<br>2A       |



RoHS



- ① Series name
- ② Single output
- ③ Output wattage
- ④ Input voltage  
24:DC18 - 36V  
48:DC36 - 76V
- ⑤ Output voltage
- ⑥ Mounting type  
(Soldering process)  
B : SMD(Pb-free solder)  
C : DIP(Pb-free solder)

| MODEL                 | SFS30241R2 | SFS30241R5 | SFS30241R8 | SFS30242R5 | SFS30243R3 | SFS302405 | SFS302412 | SFS302415 |
|-----------------------|------------|------------|------------|------------|------------|-----------|-----------|-----------|
| MAX OUTPUT WATTAGE[W] | 12.48      | 15.6       | 16.2       | 22.5       | 29.7       | 30.0      | 30.0      | 30.0      |
| DC OUTPUT             | 1.2V 10.4A | 1.5V 10.4A | 1.8V 9A    | 2.5V 9A    | 3.3V 9A    | 5V 6A     | 12V 2.5A  | 15V 2A    |

## SPECIFICATIONS

|                               | MODEL                  | SFS30241R2                                              | SFS30241R5 | SFS30241R8 | SFS30242R5 | SFS30243R3 | SFS302405 | SFS302412 | SFS302415 |
|-------------------------------|------------------------|---------------------------------------------------------|------------|------------|------------|------------|-----------|-----------|-----------|
| INPUT                         | VOLTAGE[V]             | DC18 - 36                                               |            |            |            |            |           |           |           |
|                               | CURRENT[A]             | 0.60typ                                                 | 0.74typ    | 0.76typ    | 1.04typ    | 1.36typ    | 1.36typ   | 1.36typ   | 1.39typ   |
|                               | EFFICIENCY[%]          | 86.5typ                                                 | 87.5typ    | 89typ      | 90typ      | 91typ      | 92typ     | 92typ     | 90typ     |
|                               | START-UP VOLTAGE[V]    | DC16 - 18                                               |            |            |            |            |           |           |           |
|                               | HYSTERESIS VOLTAGE[V]  | DC1 min                                                 |            |            |            |            |           |           |           |
| OUTPUT                        | VOLTAGE[V]             | 1.2                                                     | 1.5        | 1.8        | 2.5        | 3.3        | 5         | 12        | 15        |
|                               | CURRENT[A]             | 10.4                                                    | 10.4       | 9          | 9          | 9          | 6         | 2.5       | 2         |
|                               | VOLTAGE ACCURACY[%]    | +5, -3                                                  |            |            |            |            |           |           |           |
|                               | RIPPLE[mVp-p]          | 25max                                                   |            |            |            |            |           | 120max    |           |
|                               | RIPPLE NOISE[mVp-p]    | 50max                                                   |            |            |            |            |           | 150max    |           |
|                               | START-UP TIME[ms]      | 20 - 200max (DCIN 24V, Io=100%)                         |            |            |            |            |           |           |           |
|                               | OUTPUT VOLTAGE SETTING | ±1% of rated output voltage                             |            |            |            |            |           |           |           |
| PROTECTION CIRCUIT AND OTHERS | OVERCURRENT PROTECTION | Works over 103% of rating                               |            |            |            |            |           |           |           |
|                               | OVERVOLTAGE PROTECTION | Works at 120 - 140% of rating                           |            |            |            |            |           |           |           |
|                               | LOWVOLTAGE PROTECTION  | Works at 90% max of rating                              |            |            |            |            |           |           |           |
|                               | REMOTE ON/OFF          | Provided(RC open : ON, short between RC and +Vin : OFF) |            |            |            |            |           |           |           |

| MODEL                 | SFS30481R2 | SFS30481R5 | SFS30481R8 | SFS304802 | SFS30482R5 | SFS30483R3 | SFS304805 | SFS304810 | SFS304812 | SFS304815 |
|-----------------------|------------|------------|------------|-----------|------------|------------|-----------|-----------|-----------|-----------|
| MAX OUTPUT WATTAGE[W] | 12.48      | 15.6       | 16.2       | 18.0      | 22.5       | 29.7       | 30.0      | 30.0      | 30.0      | 30.0      |
| DC OUTPUT             | 1.2V 10.4A | 1.5V 10.4A | 1.8V 9A    | 2V 9A     | 2.5V 9A    | 3.3V 9A    | 5V 6A     | 10V 3A    | 12V 2.5A  | 15V 2A    |

## SPECIFICATIONS

|                                     | MODEL                  | SFS30481R2                                              | SFS30481R5 | SFS30481R8 | SFS304802 | SFS30482R5 | SFS30483R3 | SFS304805 | SFS304810 | SFS304812 | SFS304815 |
|-------------------------------------|------------------------|---------------------------------------------------------|------------|------------|-----------|------------|------------|-----------|-----------|-----------|-----------|
| INPUT                               | VOLTAGE[V]             | DC36 - 76                                               |            |            |           |            |            |           |           |           |           |
|                                     | CURRENT[A]             | 0.30typ                                                 | 0.37typ    | 0.38typ    | 0.42typ   | 0.52typ    | 0.67typ    | 0.68typ   | 0.69typ   | 0.68typ   | 0.68typ   |
|                                     | EFFICIENCY[%]          | 86typ                                                   | 87.5typ    | 89typ      | 89typ     | 91typ      | 92typ      | 92.5typ   | 91typ     | 92typ     | 92typ     |
|                                     | START-UP VOLTAGE[V]    | DC32 - 36                                               |            |            |           |            |            |           |           |           |           |
|                                     | HYSTERESIS VOLTAGE[V]  | DC2 min                                                 |            |            |           |            |            |           |           |           |           |
| OUTPUT                              | VOLTAGE[V]             | 1.2                                                     | 1.5        | 1.8        | 2         | 2.5        | 3.3        | 5         | 10        | 12        | 15        |
|                                     | CURRENT[A]             | 10.4                                                    | 10.4       | 9          | 9         | 9          | 9          | 6         | 3         | 2.5       | 2         |
|                                     | VOLTAGE ACCURACY[%]    | +5, -3                                                  |            |            |           |            |            |           |           |           |           |
|                                     | RIPPLE[mVp-p]          | 25max                                                   |            |            |           |            |            |           |           | 120max    |           |
|                                     | RIPPLE NOISE[mVp-p]    | 50max                                                   |            |            |           |            |            |           |           | 150max    |           |
|                                     | START-UP TIME[ms]      | 20 - 200max (DCIN 48V, Io=100%)                         |            |            |           |            |            |           |           |           |           |
|                                     | OUTPUT VOLTAGE SETTING | ±1% of rated output voltage                             |            |            |           |            |            |           |           |           |           |
| PROTECTION<br>CIRCUIT AND<br>OTHERS | OVERCURRENT PROTECTION | Works over 103% of rating                               |            |            |           |            |            |           |           |           |           |
|                                     | OVERVOLTAGE PROTECTION | Works at 120 - 140% of rating                           |            |            |           |            |            |           |           |           |           |
|                                     | LOWVOLTAGE PROTECTION  | Works at 90% max of rating                              |            |            |           |            |            |           |           |           |           |
|                                     | REMOTE ON/OFF          | Provided(RC open : ON, short between RC and +Vin : OFF) |            |            |           |            |            |           |           |           |           |

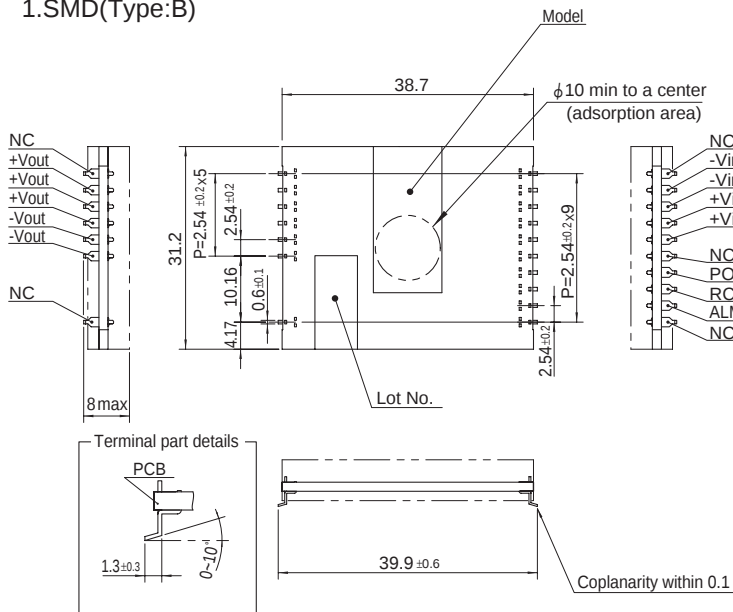
## GENERAL SPECIFICATIONS

|             |                                    |                                                                                     |
|-------------|------------------------------------|-------------------------------------------------------------------------------------|
| ISOLATION   | INPUT-OUTPUT                       | DC1.500V 1minute, 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), 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, 49.0m/s $^2$ (5G), 3minutes period, 60minutes each along X, Y and Z axis |
|             | IMPACT                             | 196.1m/s $^2$ (20G), 11ms, once each X, Y and Z axis                                |
| SAFETY      | AGENCY APPROVALS                   | UL60950-1, C-UL (CSA60950-1), EN60950-1                                             |
| OTHERS      | CASE SIZE/WEIGHT                   | 38.7 $\times$ 8.0 $\times$ 31.2mm (W $\times$ H $\times$ D) /20g max                |
|             | COOLING METHOD                     | Convection/Forced air                                                               |

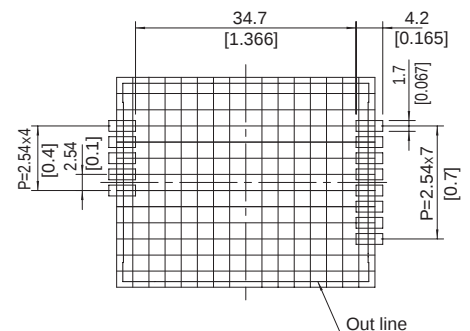
\*1 At rated input(DC24V, DC48V), rated load and 25 $^{\circ}$ C

## External view

## 1.SMD(Type:B)



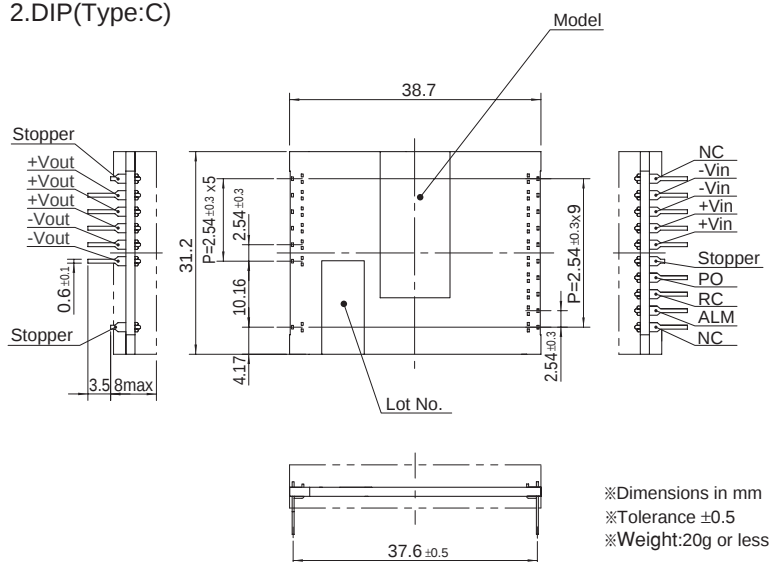
## Recommended size for processing PCB (TOP VIEW)



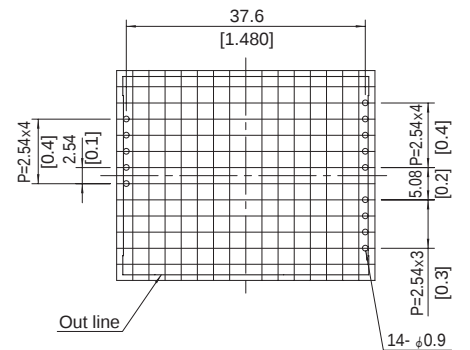
※Dimensions in: mm [inch]

※Div.: 0.1inch

## 2.DIP(Type:C)



## Recommended size for processing PCB (TOP VIEW)



※Dimensions in: mm [inch]

※Div.: 0.1inch