

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

| MODEL                 | SFS10481R2 | SFS10481R5 | SFS10481R8 | SFS104802 | SFS10482R5 | SFS10483R3 | SFS104805 | SFS104812 | SFS104815 |
|-----------------------|------------|------------|------------|-----------|------------|------------|-----------|-----------|-----------|
| MAX OUTPUT WATTAGE[W] | 4.2        | 5.25       | 5.4        | 6.0       | 7.5        | 9.9        | 10.0      | 10.8      | 10.5      |
| DC OUTPUT             | 1.2V 3.5A  | 1.5V 3.5A  | 1.8V 3A    | 2V 3A     | 2.5V 3A    | 3.3V 3A    | 5V 2A     | 12V 0.9A  | 15V 0.7A  |

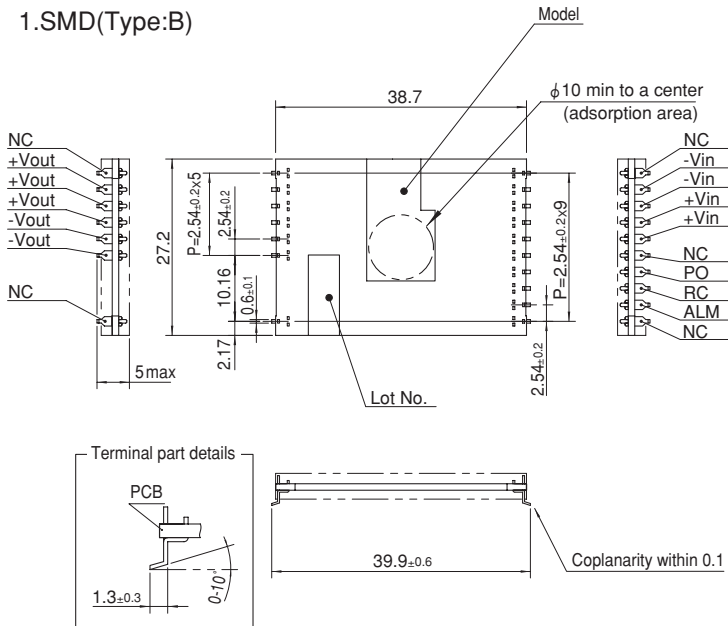
## SPECIFICATIONS

|                               | MODEL                              | SFS10481R2  | SFS10481R5 | SFS10481R8 | SFS104802 | SFS10482R5 | SFS10483R3 | SFS104805 | SFS104812 | SFS104815 |  |
|-------------------------------|------------------------------------|---|------------|------------|-----------|------------|------------|-----------|-----------|-----------|--|
| INPUT                         | VOLTAGE[V]                         | DC36 - 76   |            |            |           |            |            |           |           |           |  |
|                               | CURRENT[A]                         | *1 0.11typ  | 0.13typ    | 0.13typ    | 0.15typ   | 0.18typ    | 0.23typ    | 0.23typ   | 0.26typ   | 0.25typ   |  |
|                               | EFFICIENCY[%]                      | *1 80typ  | 82typ      | 84typ      | 85typ     | 86typ      | 88typ      | 89typ     | 88typ     | 88typ     |  |
|                               | 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         | 12        | 15        |  |
|                               | CURRENT[A]                         | 3.5   | 3.5        | 3          | 3         | 3          | 3          | 2         | 0.9       | 0.7       |  |
|                               | 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%)   |            |            |           |            |            |           |           |           |  |
| PROTECTION CIRCUIT AND OTHERS | OUTPUT VOLTAGE SETTING *1          | ±1% of rated output voltage   |            |            |           |            |            |           |           |           |  |
|                               | OVERCURRENT PROTECTION             | Works over 103% of rating   |            |            |           |            |            |           |           |           |  |
|                               | OVERVOLTAGE PROTECTION             | Works at 120 - 140% of rating   |            |            |           |            |            |           |           |           |  |
|                               | LOWVOLTAGE PROTECTION              | Works at 90% max of rating  |            |            |           |            |            |           |           |           |  |
| ISOLATION                     | REMOTE ON/OFF                      | Provided(RC open : ON, short between RC and +Vin : OFF)                                     |            |            |           |            |            |           |           |           |  |
| ENVIRONMENT                   | INPUT-OUTPUT                       | DC1,500V 1minute, DC500V 50MΩ min (20±15°C)   |            |            |           |            |            |           |           |           |  |
|                               | OPERATING TEMP.,HUMID.AND ALTITUDE | -40 to +85°C, 20 - 95%RH (Non condensing), 3,000m (10,000feet) max                          |            |            |           |            |            |           |           |           |  |
|                               | STORAGE TEMP.,HUMID.AND ALTITUDE   | -40 to +100°C, 20 - 95%RH (Non condensing), 9,000m (30,000feet) max                         |            |            |           |            |            |           |           |           |  |
|                               | VIBRATION                          | 10 - 55Hz, 49.0m/s <sup>2</sup> (5G), 3minutes period, 60minutes each along X, Y and Z axis |            |            |           |            |            |           |           |           |  |
| SAFETY                        | IMPACT                             | 196.1m/s <sup>2</sup> (20G), 11ms, once each X, Y and Z axis                                |            |            |           |            |            |           |           |           |  |
|                               | AGENCY APPROVALS                   | UL60950-1, C-UL (CSA60950-1), EN60950-1   |            |            |           |            |            |           |           |           |  |
| OTHERS                        | CASE SIZE/WEIGHT                   | 38.7×5.0×27.2mm (W×H×D) /12g max  |            |            |           |            |            |           |           |           |  |
|                               | COOLING METHOD                     | Convection  |            |            |           |            |            |           |           |           |  |

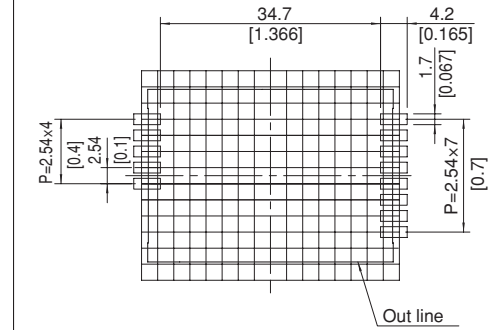
\*1 At rated input(DC48V), rated load and 25°C

External view

1.SMD(Type:B)



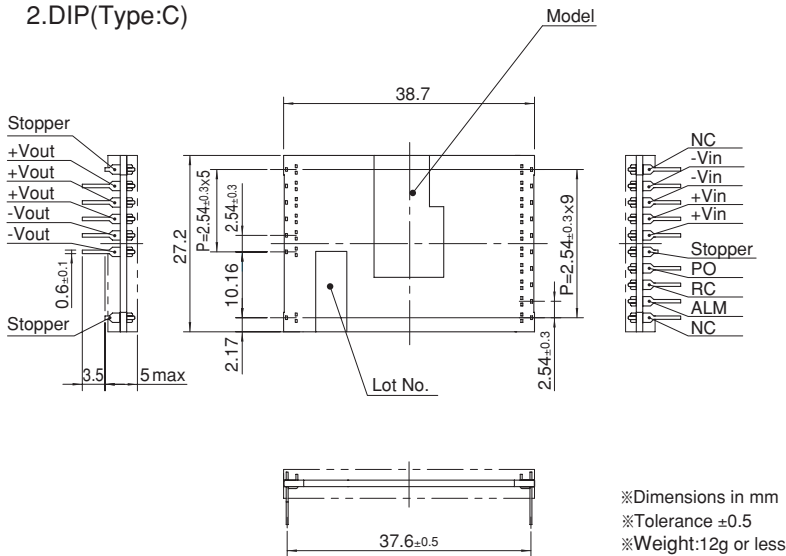
Recommended size for processing PCB (TOP VIEW)



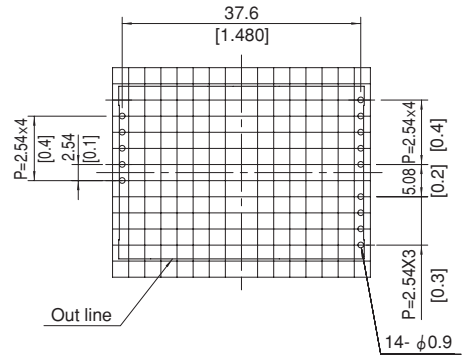
※Dimensions in:  $\frac{\text{mm}}{[\text{inch}]}$

※Div.: 0.1inch

2.DIP(Type:C)



Recommended size for processing PCB (TOP VIEW)

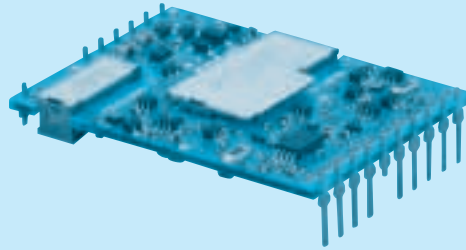
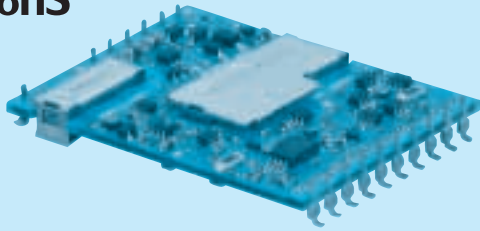


※Dimensions in:  $\frac{\text{mm}}{[\text{inch}]}$

※Div.: 0.1inch



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                 | SFS15241R5 | SFS15241R8 | SFS15242R5 | SFS15243R3 | SFS152405 | SFS152412 | SFS152415 |
|-----------------------|------------|------------|------------|------------|-----------|-----------|-----------|
| MAX OUTPUT WATTAGE[W] | 7.8        | 8.1        | 11.25      | 14.85      | 15.0      | 15.0      | 15.0      |
| DC OUTPUT             | 1.5V 5.2A  | 1.8V 4.5A  | 2.5V 4.5A  | 3.3V 4.5A  | 5V 3A     | 12V 1.25A | 15V 1A    |

## SPECIFICATIONS

|                               | MODEL                     | SFS15241R5  | SFS15241R8 | SFS15242R5 | SFS15243R3 | SFS152405 | SFS152412 | SFS152415 |  |
|-------------------------------|---------------------------|---|------------|------------|------------|-----------|-----------|-----------|--|
| INPUT                         | VOLTAGE[V]                | DC18 - 36   |            |            |            |           |           |           |  |
|                               | CURRENT[A]                | *1 0.39typ  | 0.4typ     | 0.54typ    | 0.7typ     | 0.69typ   | 0.7typ    | 0.7typ    |  |
|                               | EFFICIENCY[%]             | *1 83typ  | 85typ      | 87typ      | 89typ      | 90typ     | 89typ     | 89typ     |  |
|                               | START-UP VOLTAGE[V]       | DC16 - 18   |            |            |            |           |           |           |  |
|                               | HYSTERESIS VOLTAGE[V]     | DC1 min   |            |            |            |           |           |           |  |
| OUTPUT                        | VOLTAGE[V]                | 1.5   | 1.8        | 2.5        | 3.3        | 5         | 12        | 15        |  |
|                               | CURRENT[A]                | 5.2   | 4.5        | 4.5        | 4.5        | 3         | 1.25      | 1         |  |
|                               | 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%)                         |            |            |            |           |           |           |  |
| PROTECTION CIRCUIT AND OTHERS | OUTPUT VOLTAGE SETTING *1 | ±1% of rated output voltage                             |            |            |            |           |           |           |  |
|                               | 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                 | SFS15481R2 | SFS15481R5 | SFS15481R8 | SFS154802 | SFS15482R5 | SFS15483R3 | SFS154805 | SFS154812 | SFS154815 |
|-----------------------|------------|------------|------------|-----------|------------|------------|-----------|-----------|-----------|
| MAX OUTPUT WATTAGE[W] | 6.24       | 7.8        | 8.1        | 9.0       | 11.25      | 14.85      | 15.0      | 15.0      | 15.0      |
| DC OUTPUT             | 1.2V 5.2A  | 1.5V 5.2A  | 1.8V 4.5A  | 2V 4.5A   | 2.5V 4.5A  | 3.3V 4.5A  | 5V 3A     | 12V 1.25A | 15V 1A    |

## SPECIFICATIONS

|                               | MODEL                     | SFS15481R2  | SFS15481R5 | SFS15481R8 | SFS154802 | SFS15482R5 | SFS15483R3 | SFS154805 | SFS154812 | SFS154815 |  |
|-------------------------------|---------------------------|---|------------|------------|-----------|------------|------------|-----------|-----------|-----------|--|
| INPUT                         | VOLTAGE[V]                | DC36 - 76   |            |            |           |            |            |           |           |           |  |
|                               | CURRENT[A]                | *1 0.16typ  | 0.2typ     | 0.2typ     | 0.22typ   | 0.27typ    | 0.35typ    | 0.35typ   | 0.35typ   | 0.35typ   |  |
|                               | EFFICIENCY[%]             | *1 82typ  | 83typ      | 85typ      | 86typ     | 87typ      | 89typ      | 90typ     | 89typ     | 89typ     |  |
|                               | 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         | 12        | 15        |  |
|                               | CURRENT[A]                | 5.2   | 5.2        | 4.5        | 4.5       | 4.5        | 4.5        | 3         | 1.25      | 1         |  |
|                               | 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%)                         |            |            |           |            |            |           |           |           |  |
| PROTECTION CIRCUIT AND OTHERS | OUTPUT VOLTAGE SETTING *1 | ±1% of rated output voltage                             |            |            |           |            |            |           |           |           |  |
|                               | 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) |            |            |           |            |            |           |           |           |  |

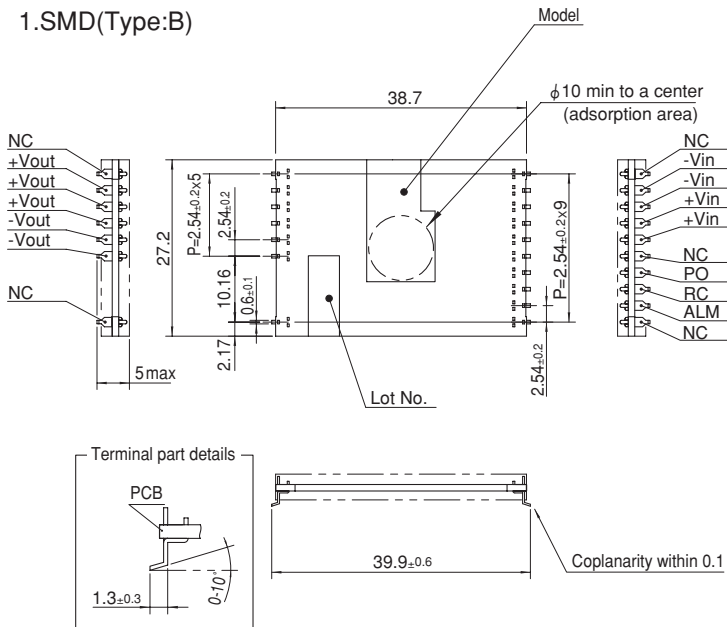
### GENERAL SPECIFICATIONS

|                    |  |   |
|--------------------|--|---|
| <b>ISOLATION</b>   | <b>INPUT-OUTPUT</b>                      | DC1.500V 1minute, DC500V 50MΩ min (20±15°C)   |
| <b>ENVIRONMENT</b> | <b>OPERATING TEMP.HUMID.AND ALTITUDE</b> | -40 to +85°C, 20 - 95%RH (Non condensing), 3,000m (10,000feet) max                          |
|                    | <b>STORAGE TEMP.HUMID.AND ALTITUDE</b>   | -40 to +100°C, 20 - 95%RH (Non condensing), 9,000m (30,000feet) max                         |
|                    | <b>VIBRATION</b>                         | 10 - 55Hz, 49.0m/s <sup>2</sup> (5G), 3minutes period, 60minutes each along X, Y and Z axis |
|                    | <b>IMPACT</b>                            | 196.1m/s <sup>2</sup> (20G), 11ms, once each X, Y and Z axis                                |
| <b>SAFETY</b>      | <b>AGENCY APPROVALS</b>                  | UL60950-1, C-UL (CSA60950-1), EN60950-1   |
| <b>OTHERS</b>      | <b>CASE SIZE/WEIGHT</b>                  | 38.7 × 5.0 × 27.2mm (W × H × D) /12g max  |
|                    | <b>COOLING METHOD</b>                    | Convection  |

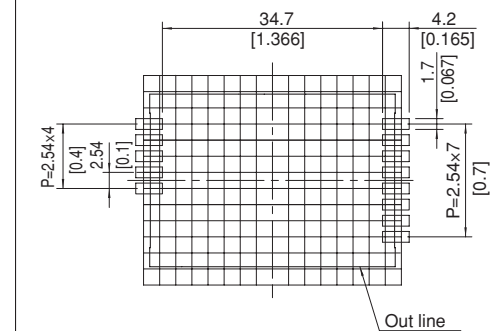
\*1 At rated input(DC24V, DC48V), rated load and 25°C

### External view

#### 1.SMD(Type:B)



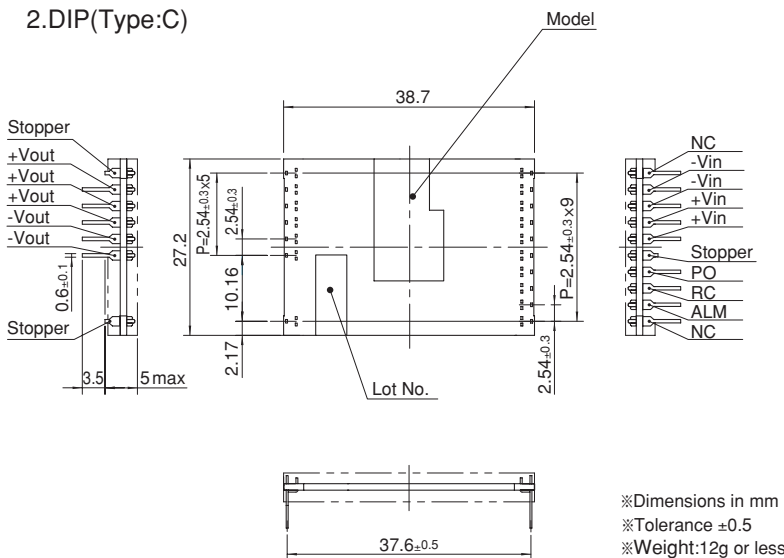
#### Recommended size for processing PCB (TOP VIEW)



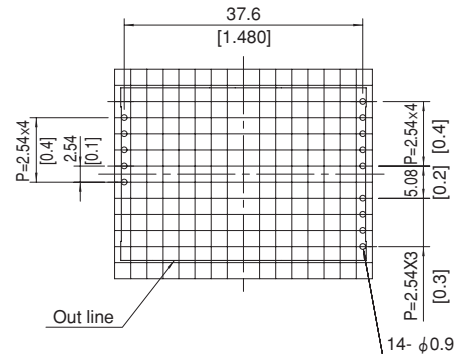
※Dimensions in: mm [inch]

※Div.: 0.1inch

#### 2.DIP(Type:C)

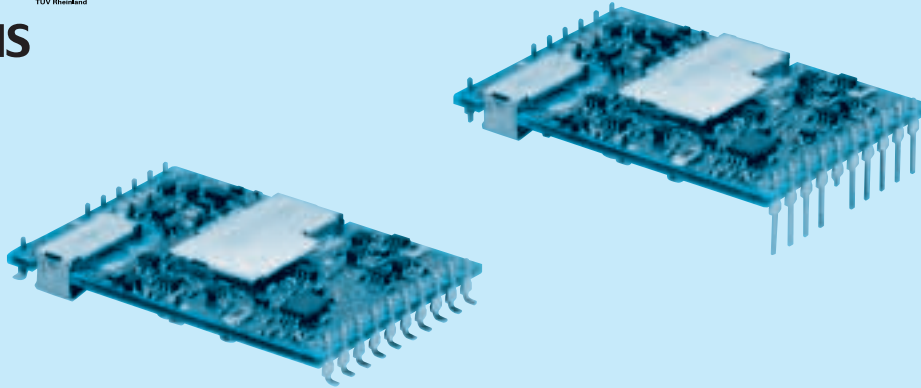


#### Recommended size for processing PCB (TOP VIEW)



※Dimensions in: mm [inch]

※Div.: 0.1inch



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

| MODEL                 | SFS20481R5 | SFS20481R8 | SFS20482R5 | SFS20483R3 | SFS204805 |
|-----------------------|------------|------------|------------|------------|-----------|
| MAX OUTPUT WATTAGE[W] | 13.5       | 14.4       | 17.5       | 19.8       | 20.0      |
| DC OUTPUT             | 1.5V 9A    | 1.8V 8A    | 2.5V 7A    | 3.3V 6A    | 5V 4A     |

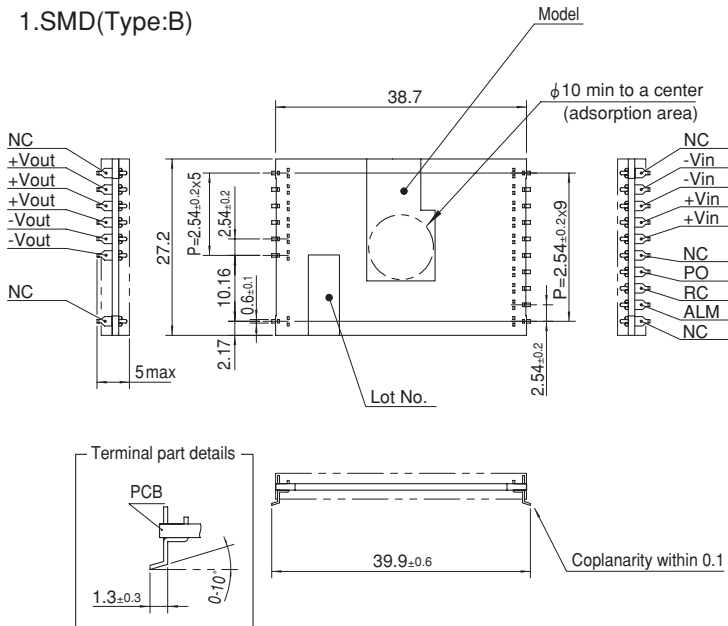
**SPECIFICATIONS**

|                               | MODEL                              | SFS20481R5  | SFS20481R8 | SFS20482R5 | SFS20483R3 | SFS204805 |
|-------------------------------|------------------------------------|---|------------|------------|------------|-----------|
| INPUT                         | VOLTAGE[V]                         | DC36 - 76   |            |            |            |           |
|                               | CURRENT[A]                         | *1 0.33typ  | 0.35typ    | 0.41typ    | 0.46typ    | 0.46typ   |
|                               | EFFICIENCY[%]                      | *1 86typ  | 85typ      | 88typ      | 90typ      | 90typ     |
|                               | START-UP VOLTAGE[V]                | DC32 - 36   |            |            |            |           |
|                               | HYSTERESIS VOLTAGE[V]              | DC2 min   |            |            |            |           |
| OUTPUT                        | VOLTAGE[V]                         | 1.5   | 1.8        | 2.5        | 3.3        | 5         |
|                               | CURRENT[A]                         | 9   | 8          | 7          | 6          | 4         |
|                               | VOLTAGE ACCURACY[%]                | +5, -3  |            |            |            |           |
|                               | RIPPLE[mVp-p]                      | 50max   |            |            |            |           |
|                               | RIPPLE NOISE[mVp-p]                | 50max   |            |            |            |           |
|                               | START-UP TIME[ms]                  | 20 - 200max (DCIN 48V, Io=100%)   |            |            |            |           |
| PROTECTION CIRCUIT AND OTHERS | OUTPUT VOLTAGE SETTING *1          | +2, -1% of rated output voltage   |            |            |            |           |
|                               | OVERCURRENT PROTECTION             | Works over 103% of rating   |            |            |            |           |
|                               | OVERVOLTAGE PROTECTION             | Works at 115 - 145% of rating   |            |            |            |           |
|                               | LOWVOLTAGE PROTECTION              | Works at 95% max of rating  |            |            |            |           |
| ISOLATION                     | REMOTE ON/OFF                      | Provided(RC open : ON, short between RC and +Vin : OFF)                                     |            |            |            |           |
| ENVIRONMENT                   | INPUT-OUTPUT                       | DC1,500V 1minute, DC500V 50MΩ min (20±15°C)   |            |            |            |           |
|                               | OPERATING TEMP.,HUMID.AND ALTITUDE | -40 to +85°C, 20 - 95%RH (Non condensing), 3,000m (10,000feet) max                          |            |            |            |           |
|                               | STORAGE TEMP.,HUMID.AND ALTITUDE   | -40 to +100°C, 20 - 95%RH (Non condensing), 9,000m (30,000feet) max                         |            |            |            |           |
|                               | VIBRATION                          | 10 - 55Hz, 49.0m/s <sup>2</sup> (5G), 3minutes period, 60minutes each along X, Y and Z axis |            |            |            |           |
| SAFETY                        | IMPACT                             | 196.1m/s <sup>2</sup> (20G), 11ms, once each X, Y and Z axis                                |            |            |            |           |
|                               | AGENCY APPROVALS                   | UL60950-1, C-UL(CSA60950-1), EN60950-1  |            |            |            |           |
| OTHERS                        | CASE SIZE/WEIGHT                   | 38.7×5.0×27.2mm (W×H×D) /12g max  |            |            |            |           |
|                               | COOLING METHOD                     | Convection/Forced air   |            |            |            |           |

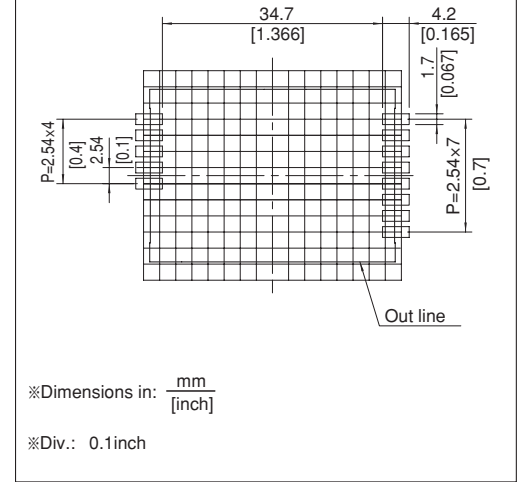
\*1 At rated input(DC48V), rated load and 25°C

External view

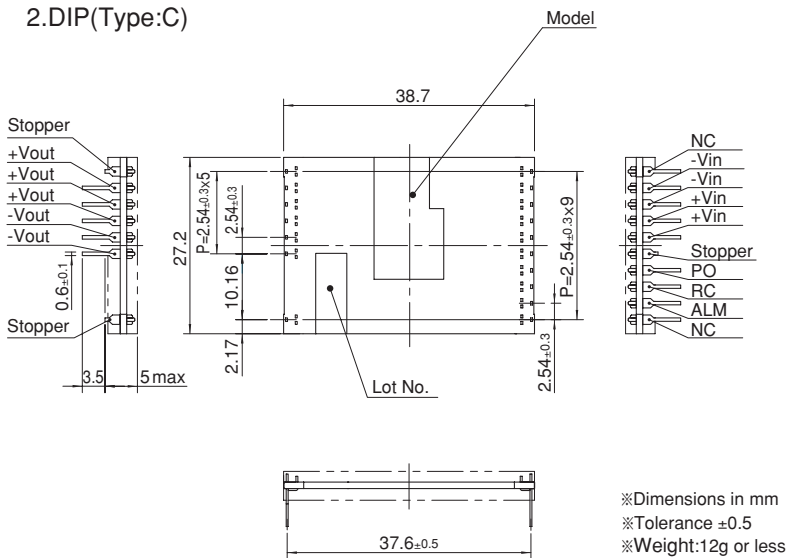
1.SMD(Type:B)



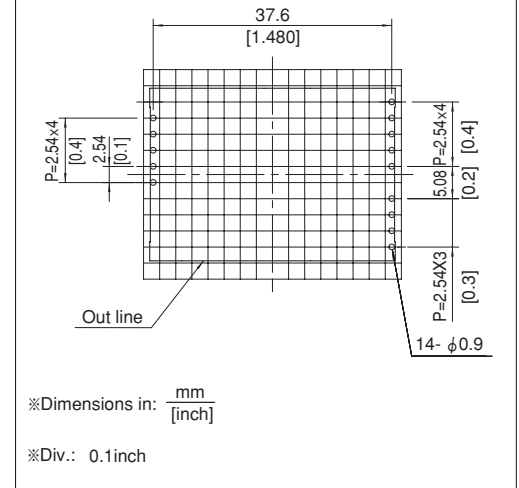
Recommended size for processing PCB (TOP VIEW)



2.DIP(Type:C)



Recommended size for processing PCB (TOP VIEW)



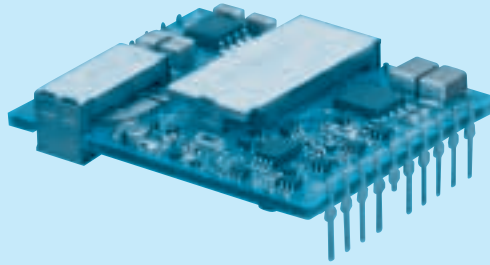
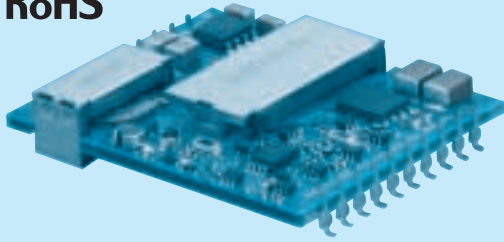
# SFS30

SF S 30 48 3R3 B

① ② ③ ④ ⑤ ⑥



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]                | *1 0.60typ  | 0.74typ    | 0.76typ    | 1.04typ    | 1.36typ    | 1.36typ   | 1.36typ   | 1.39typ   |  |
|                               | EFFICIENCY[%]             | *1 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%)                         |            |            |            |            |           |           |           |  |
| PROTECTION CIRCUIT AND OTHERS | OUTPUT VOLTAGE SETTING *1 | ±1% of rated output voltage                             |            |            |            |            |           |           |           |  |
|                               | 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]                | *1 0.30typ  | 0.37typ    | 0.38typ    | 0.42typ   | 0.52typ    | 0.67typ    | 0.68typ   | 0.69typ   | 0.68typ   | 0.68typ   |  |
|                               | EFFICIENCY[%]             | *1 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%)                         |            |            |           |            |            |           |           |           |           |  |
| PROTECTION CIRCUIT AND OTHERS | OUTPUT VOLTAGE SETTING *1 | ±1% of rated output voltage                             |            |            |           |            |            |           |           |           |           |  |
|                               | 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) |            |            |           |            |            |           |           |           |           |  |

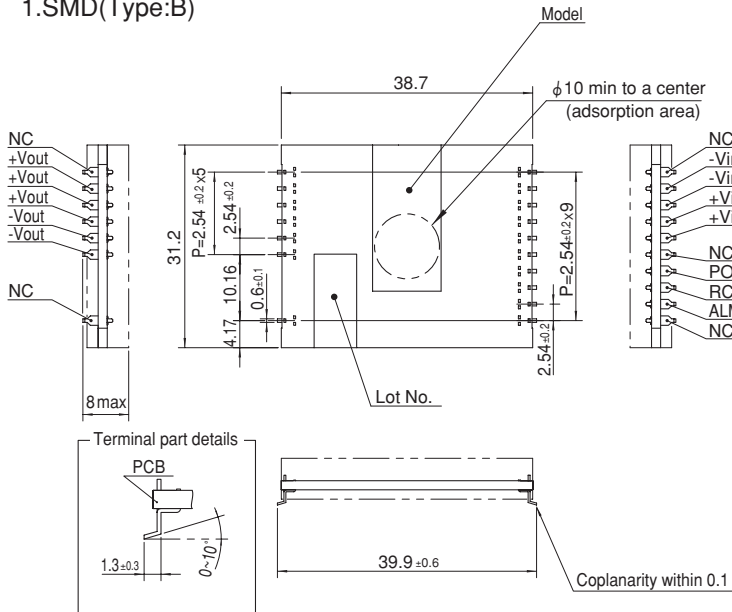
GENERAL SPECIFICATIONS

|                    |  |   |
|--------------------|--|---|
| <b>ISOLATION</b>   | <b>INPUT-OUTPUT</b>                      | DC1.500V 1minute, DC500V 50MΩ min (20±15°C)   |
| <b>ENVIRONMENT</b> | <b>OPERATING TEMP.HUMID.AND ALTITUDE</b> | -40 to +85°C, 20 - 95%RH (Non condensing), 3,000m (10,000feet) max                          |
|                    | <b>STORAGE TEMP.HUMID.AND ALTITUDE</b>   | -40 to +100°C, 20 - 95%RH (Non condensing), 9,000m (30,000feet) max                         |
|                    | <b>VIBRATION</b>                         | 10 - 55Hz, 49.0m/s <sup>2</sup> (5G), 3minutes period, 60minutes each along X, Y and Z axis |
|                    | <b>IMPACT</b>                            | 196.1m/s <sup>2</sup> (20G), 11ms, once each X, Y and Z axis                                |
| <b>SAFETY</b>      | <b>AGENCY APPROVALS</b>                  | UL60950-1, C-UL (CSA60950-1), EN60950-1   |
| <b>OTHERS</b>      | <b>CASE SIZE/WEIGHT</b>                  | 38.7×8.0×31.2mm (W×H×D) /20g max  |
|                    | <b>COOLING METHOD</b>                    | Convection/Forced air   |

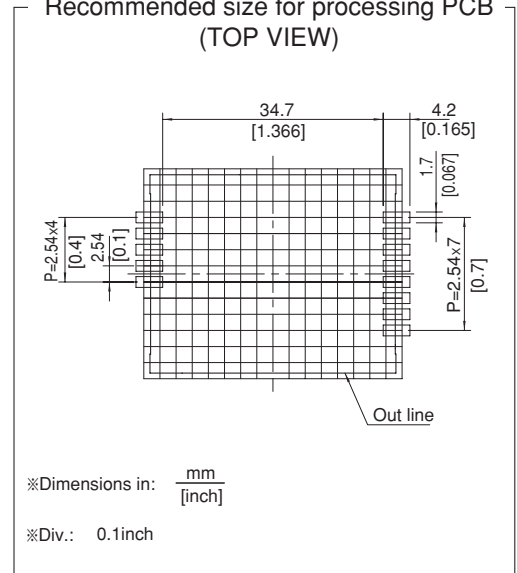
\*1 At rated input(DC24V, DC48V), rated load and 25°C

External view

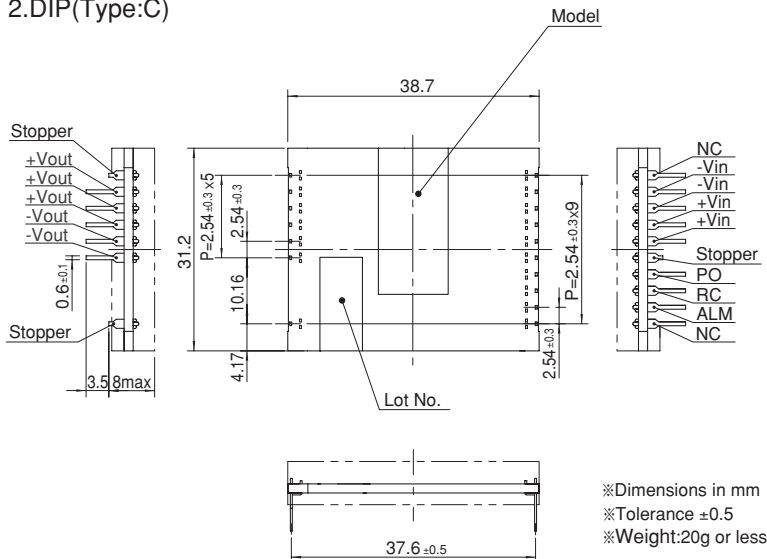
1.SMD(Type:B)



Recommended size for processing PCB (TOP VIEW)



2.DIP(Type:C)



Recommended size for processing PCB (TOP VIEW)

