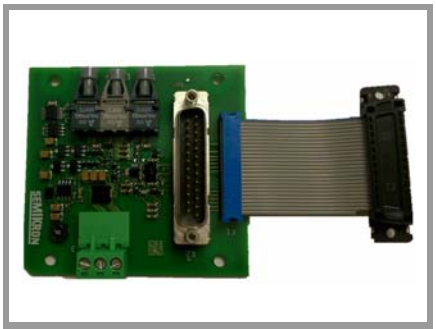
# SKiiP4 F-Option (D-Sub connector, no case)



## Fiber Optic Adapter

**SKiiP4 F-Option (D-Sub connector, no case)**

### Features

- Fiber optic link for all SKiiP4 Types
- Transmits the PWM control signals from the controller to SKiiP4 driver
- Transmits the GPIO-error signal from SKiiP4 driver to controller
- Cable length between SKiiP4 and F-Option board up to 1,5m
- No plastic housing
- PCB coated with varnish
- RoHS compliant

### Typical Applications*

- Harsh EMI environment

### Remarks

For further information please refer to Technical Explanation SKiiP®4 F-Option Board Rev.1 and Technical Explanation SKiiP®4 Rev.3

### Footnotes

1) Supply voltage for SKiiP
2) Operation temperature is ambient temperature around the board. Please note: by operation temperature near 85°C the life time of the product is reduced
3) Current consumption for F-Option Board only
4) See HFBR-0501 series technical data for specific characteristics and conditions

No circuit

**Absolute Maximum Ratings**

| Symbol | Conditions | Values | Unit |
|---|---|---|---|
| $V_{S2}$ | Power supply 1) | 19.2 ... 28.8 | V |
| $T_{op}$ | Operating temperature 2) | -40 ... 85 | °C |
| $T_{stg}$ | Storage temperature | -40 ... 85 | °C |

**Characteristics**

| Symbol | Conditions | min. | typ. | max. | Unit |
|---|---|---|---|---|---|
| $V_{S2}$ | Power supply | 19.2 | 24 | 28.8 | V |
| $I_{S0}$ | Supply current (no load)3) | | 24 | | mA |
| $I_{S2}$ | Supply current (max load)3) | | 36 | | mA |
| $t_{d(on)IO}$ | Input-output turn-on signal propagation time | | 0.14 | | µs |
| $t_{d(off)IO}$ | Input-output turn-off signal propagation time | | 0.14 | | µs |
| $t_{d(err)}$ | Error input-output propagation time | | 10 | | µs |
| $I_{Fdc}$ | Transmitter current4) | | 53 | | mA |
| $\lambda_{PEAK}$ | Peak emission wave length | | 660 | | nm |
| w | weight of PCB | | 60 | | g |
| MTBF | Mean Time Between Failure @ Ta = 40°C | | 3.37 | | $10^6$h |
| HxWxD | Dimensions | | 26x101 x97 | | mm |

| | Type | Function |
|---|---|---|
| Optical receiver | HFBR-2521 ETZ | Transmits the PWM control signal from controller to SKiiP driver |
| Optical transmitter | HFBR-1521 ETZ | Transmits the GPIO-error signal from SKiiP driver to controller |

This is an electrostatic discharge sensitive device (ESDS), international standard IEC 60747-1, Chapter IX

* The specifications of our components may not be considered as an assurance of component characteristics. Components have to be tested for the respective application. Adjustments may be necessary. The use of SEMIKRON products in life support appliances and systems is subject to prior specification and written approval by SEMIKRON. We therefore strongly recommend prior consultation of our staff.