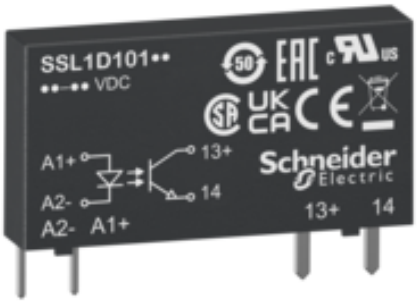
Product data sheet
Characteristics

SSL1D03BD
Solid state slim relay, Harmony, 3.5A, DC switching, input 15 to 30V DC, output 3 to 30V DC



Main

Range of product	Harmony Solid State Relays
Device short name	SSL
Network number of phases	1 phase
[Uc] control circuit voltage	15...30 V
Output switching mode	DC switching
[Ui] rated insulation voltage	30 V
Insulation resistance	> 100 MOhm at 500 V DC
Electromagnetic compatibility	Electrostatic discharge - test level: 4 kV criteria B (contact discharge) conforming to IEC 61000- Electrostatic discharge - test level: 8 kV criteria B (air discharge) conforming to IEC 61000-4-2 Conducted RF disturbances - test level: 10 V criteria A (0.15...80 MHz) conforming to IEC 6100 Radiated radio-frequency electromagnetic field immunity test - test level: 10 V/m criteria A (80 Radiated radio-frequency electromagnetic field immunity test - test level: 3 V/m criteria A (1.4.. Electrical fast transient/burst immunity test - test level: 2 kV criteria B (5 kHz) conforming to IE Electrical fast transient/burst immunity test - test level: 1 kV criteria B (5 kHz) conforming to IE Surge immunity test - test level: 0.5 kV criteria B (line to line) conforming to IEC 61000-4-5 Surge immunity test - test level: 1 kV criteria B (line to earth) conforming to IEC 61000-4-5 Radiated emission - test level: 30...1000 Mhz conforming to IEC 60947-1 Conducted emission - test level: 0.15...30 Mhz conforming to IEC 60947-1
[Uimp] rated impulse withstand voltage	3.5 KV for input to case conforming to IEC 62314 3.5 KV for input/output circuit conforming to UL 508 3.5 KV for input/output circuit conforming to IEC 62314 3.5 KV output to case conforming to IEC 62314 3.5 KV output to case 3.5 KV for input to case conforming to UL 508 3.5 KV output to case conforming to UL 508

Complementary

Mounting support	Socket
[In] rated current	3.5 A
Output voltage	3...30 V DC
[Uc] control circuit voltage	15...30 V DC
Capacitance unbalance	2.5 PF input/output
Minimum switching voltage	15 V DC turn-on
Maximum switching voltage	10 V DC turn-off
Input current	7 MA
Input impedance	3500 Ohm
Solid state output type	Mosfet output DC switching
Load current	0.001…3.5 A
Absolute maximum voltage	35 V
Maximum operating frequency	500 Hz

Surge current	9 A for 10 ms
Maximum voltage drop	<0.5 V on-state
Maximum leakage current	0.001 MA off-state
Response time	0.2 ms (turn-on) 0.1 ms (turn-off)
Overvoltage category	III
Width	5 Mm
Height	28 Mm
Depth	15 Mm
Net weight	0.0041 Kg
Device presentation	Complete product

Environment

Flame retardance	V0 conforming to UL 94
Dielectric strength	2500 V for input/output
Pollution degree	2
Standards	IEC/EN 60947-1 IEC/EN 62314 UL 508 C22.2 No. 14
Product certifications	cURus[RETURN]CSA[RETURN]EAC[RETURN]CE[RETURN]UKCA
Marking	CE
IP degree of protection	IP00
Ambient air temperature for operation	-20…80 °C
Ambient air temperature for storage	-20…85 °C

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	0.500 Cm
Package 1 Width	1.800 Cm
Package 1 Length	2.800 Cm
Package 1 Weight	4.000 G
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	3.000 Cm
Package 2 Width	5.000 Cm
Package 2 Length	12.500 Cm
Package 2 Weight	55.000 G
Unit Type of Package 3	S01
Number of Units in Package 3	280
Package 3 Height	15.000 Cm
Package 3 Width	15.000 Cm
Package 3 Length	40.000 Cm
Package 3 Weight	1.778 Kg

Offer Sustainability

Recyclability potential, in %	27
Total lifecycle Carbon footprint	17 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	0.1560610782
Carbon footprint of the manufacturing phase [A1 to A3]	0.2 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.0006451075
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.0000302322
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	16.464112

Carbon footprint of the use phase [B2, B3, B4, B6]	16 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	No
Carbon footprint of the end-of-life phase [C1 to C4]	0.001276005
Carbon footprint of the end-of-life phase [C1 to C4]	0 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	17
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, wh
End of life manual availability	No need of specific recycling operations
Take-back	No

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised