



Figure similar

SIMATIC S7-1200, Digital input SB 1221, 4 DI, 5V DC 200kHz, Sourcing input

| General information                                    |  |
|--|--|
| Product type designation                               | SB 1221, DI 4x5 V DC 200 kHz   |
| Input current  |  |
| from backplane bus 5 V DC, typ.                        | 40 mA  |
| Power loss   |  |
| Power loss, typ.                                       | 1 W  |
| Digital inputs   |  |
| Number of digital inputs                               | 4; Current-sourcing  |
| • in groups of   | 4  |
| Input voltage  |  |
| • Type of input voltage                                | DC   |
| • Rated value (DC)                                     | 5 V  |
| • for signal "0"                                       | (L+ minus 1.0 V DC) ... L+ (2.2 ... 0 mA)  |
| • for signal "1"                                       | 0 V ... (L+ minus 2.0 V DC (20 ... 5.1 mA))  |
| Input current  |  |
| • for signal "0", max. (permissible quiescent current) | 2.2 mA   |
| • for signal "1", min.                                 | 5.1 mA   |
| Input delay (for rated value of input voltage)         |  |
| for standard inputs                                    |  |
| — parameterizable                                      | Yes; 0.1 / 0.2 / 0.4 / 0.8 / 1.6 / 3.2 / 6.4 / 10.0 / 12.8 / 20.0 μs; 0.05 / 0.1 / 0.2 / 0.4 / 0.8 / 1.6 / 3.2 / 6.4 / 10.0 / 12.8 / 20.0 ms |
| for interrupt inputs                                   |  |
| — parameterizable                                      | Yes  |
| for technological functions                            |  |
| — parameterizable                                      | Yes  |
| Cable length   |  |
| • shielded, max.                                       | 50 m; shielded, twisted pair   |
| Interrupts/diagnostics/status information              |  |
| Diagnostics indication LED                             |  |
| • for status of the inputs                             | Yes  |
| Standards, approvals, certificates                     |  |
| CE mark  | Yes  |
| CSA approval   | Yes  |
| UL approval  | Yes  |
| cULus  | Yes  |
| FM approval  | Yes  |

|   |                                       |
|---|---------------------------------------|
| RCM (formerly C-TICK)                             | Yes                                   |
| KC approval                                       | Yes                                   |
| Marine approval                                   | Yes                                   |
| <b>Ambient conditions</b>                         |                                       |
| Free fall   |                                       |
| • Fall height, max.                               | 0.3 m; five times, in product package |
| Ambient temperature during operation              |                                       |
| • min.  | -20 °C                                |
| • max.  | 60 °C                                 |
| • horizontal installation, min.                   | -20 °C                                |
| • horizontal installation, max.                   | 60 °C                                 |
| • vertical installation, min.                     | -20 °C                                |
| • vertical installation, max.                     | 50 °C                                 |
| Ambient temperature during storage/transportation |                                       |
| • min.  | -40 °C                                |
| • max.  | 70 °C                                 |
| Air pressure acc. to IEC 60068-2-13               |                                       |
| • Storage/transport, min.                         | 660 hPa                               |
| • Storage/transport, max.                         | 1 080 hPa                             |
| Relative humidity                                 |                                       |
| • Operation at 25 °C without condensation, max.   | 95 %                                  |
| <b>Mechanics/material</b>                         |                                       |
| Enclosure material (front)                        |                                       |
| • Plastic   | Yes                                   |
| <b>Dimensions</b>                                 |                                       |
| Width   | 38 mm                                 |
| Height  | 62 mm                                 |
| Depth   | 21 mm                                 |
| <b>Weights</b>                                    |                                       |
| Weight, approx.                                   | 35 g                                  |

**last modified:** 2/26/2021 