



### SI8661BD-B-ISR Information



For Reference Only

Part Number SI8661BD-B-ISR Manufacturer Silicon Labs Category Isolators

**Digital Isolators** 

**Description** DGTL ISO 5KV 6CH GEN PURP 16SOIC

**Package** 16-SOIC (0.295", 7.50mm Width)

For the pricing/inventory/lead time, please contact

us

Website: https://www.heisener.com E-mail: salesdept@heisener.com



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# **Certified Quality**

Heisener's commitment to quality has shaped our processes for sourcing, testing, shipping, and every step in between. This foundation underlies each component we sell.









## SI8661BD-B-ISR Specifications

| Manufacturer Part Number         \$\$18661BD-B-ISR           Manufacturer         \$\$18con Labs           Category         Isolators           Package         16-SOIC (0.295", 7.50mm Width)           Series         Automotive, AEC-Q100           Technology         Capacitive Coupling           Type         General Purpose           Isolated Power         No           Number of Channels         6           Inputs - Side 1/Side 2         5/1           Channel Type         Unidirectional           Voltage - Isolation         5000Vrms           Common Mode Transient Immunity (Min)         35kV/µs           Data Rate         150Mbps           Propagation Delay tpLH / tpHL (Max)         13ns, 13ns           Pulse Width Distortion (Max)         4.5ns           Rise / Fall Time (Typ)         2.5ns, 2.5ns           Voltage - Supply         2.5 V ~ 5.5 V           Operating Temperature         -40°C ~ 125°C           Package / Case         16-SOIC (0.295", 7.50mm Width)  |                                      |                                |
|--|--------------------------------------|--------------------------------|
| CategoryIsolatorsPackage16-SOIC (0.295", 7.50mm Width)SeriesAutomotive, AEC-Q100TechnologyCapacitive CouplingTypeGeneral PurposeIsolated PowerNoNumber of Channels6Inputs - Side 1/Side 25/1Channel TypeUnidirectionalVoltage - Isolation5000VrmsCommon Mode Transient Immunity (Min)35kV/µsData Rate150MbpsPropagation Delay tpLH / tpHL (Max)13ns, 13nsPulse Width Distortion (Max)4.5nsRise / Fall Time (Typ)2.5ns, 2.5nsVoltage - Supply2.5 V ~ 5.5 VOperating Temperature-40°C ~ 125°C  | Manufacturer Part Number             | SI8661BD-B-ISR                 |
| Package         16-SOIC (0.295", 7.50mm Width)           Series         Automotive, AEC-Q100           Technology         Capacitive Coupling           Type         General Purpose           Isolated Power         No           Number of Channels         6           Inputs - Side 1/Side 2         5/1           Channel Type         Unidirectional           Voltage - Isolation         5000Vrms           Common Mode Transient Immunity (Min)         35kV/μs           Data Rate         150Mbps           Propagation Delay tpLH / tpHL (Max)         13ns, 13ns           Pulse Width Distortion (Max)         4.5ns           Rise / Fall Time (Typ)         2.5ns, 2.5ns           Voltage - Supply         2.5 V ~ 5.5 V           Operating Temperature         -40°C ~ 125°C  | Manufacturer                         | Silicon Labs                   |
| Package         16-SOIC (0.295", 7.50mm Width)           Series         Automotive, AEC-Q100           Technology         Capacitive Coupling           Type         General Purpose           Isolated Power         No           Number of Channels         6           Inputs - Side 1/Side 2         5/1           Channel Type         Unidirectional           Voltage - Isolation         5000Vrms           Common Mode Transient Immunity (Min)         35kV/μs           Data Rate         150Mbps           Propagation Delay tpLH / tpHL (Max)         13ns, 13ns           Pulse Width Distortion (Max)         4.5ns           Rise / Fall Time (Typ)         2.5ns, 2.5ns           Voltage - Supply         2.5 V ~ 5.5 V           Operating Temperature         -40°C ~ 125°C  | Category                             | Isolators                      |
| SeriesAutomotive, AEC-Q100TechnologyCapacitive CouplingTypeGeneral PurposeIsolated PowerNoNumber of Channels6Inputs - Side 1/Side 25/1Channel TypeUnidirectionalVoltage - Isolation5000VrmsCommon Mode Transient Immunity (Min)35kV/μsData Rate150MbpsPropagation Delay tpLH / tpHL (Max)13ns, 13nsPulse Width Distortion (Max)4.5nsRise / Fall Time (Typ)2.5ns, 2.5nsVoltage - Supply2.5 V ~ 5.5 VOperating Temperature-40°C ~ 125°C  |                                      | Digital Isolators              |
| Technology Type General Purpose Isolated Power No Number of Channels Inputs - Side 1/Side 2 Channel Type Unidirectional Voltage - Isolation Common Mode Transient Immunity (Min) Data Rate 150Mbps Propagation Delay tpLH / tpHL (Max) Pulse Width Distortion (Max) Rise / Fall Time (Typ) Voltage - Supply Operating Temperature  Capacitive Coupling General Purpose  House Suppling Suppli | Package                              | 16-SOIC (0.295", 7.50mm Width) |
| Type         General Purpose           Isolated Power         No           Number of Channels         6           Inputs - Side 1/Side 2         5/1           Channel Type         Unidirectional           Voltage - Isolation         5000Vrms           Common Mode Transient Immunity (Min)         35kV/μs           Data Rate         150Mbps           Propagation Delay tpLH / tpHL (Max)         13ns, 13ns           Pulse Width Distortion (Max)         4.5ns           Rise / Fall Time (Typ)         2.5ns, 2.5ns           Voltage - Supply         2.5 V ~ 5.5 V           Operating Temperature         -40°C ~ 125°C  | Series                               | Automotive, AEC-Q100           |
| Isolated Power  Number of Channels  Inputs - Side 1/Side 2  Channel Type  Unidirectional  Voltage - Isolation  Common Mode Transient Immunity (Min)  Data Rate  150Mbps  Propagation Delay tpLH / tpHL (Max)  Pulse Width Distortion (Max)  Rise / Fall Time (Typ)  Voltage - Supply  Operating Temperature  No  Unidirectional  Unidirectional  150Mbv  1300Vrms  150Mbps  13ns, 13ns  2.5ns, 2.5ns  2.5ns  2.5ns  4.5ns  | Technology                           | Capacitive Coupling            |
| Number of Channels6Inputs - Side 1/Side 2 $5/1$ Channel TypeUnidirectionalVoltage - Isolation $5000 \text{Vrms}$ Common Mode Transient Immunity (Min) $35 \text{kV}/\mu \text{s}$ Data Rate $150 \text{Mbps}$ Propagation Delay tpLH / tpHL (Max) $13 \text{ns}, 13 \text{ns}$ Pulse Width Distortion (Max) $4.5 \text{ns}$ Rise / Fall Time (Typ) $2.5 \text{ns}, 2.5 \text{ns}$ Voltage - Supply $2.5 \text{ V} \sim 5.5 \text{ V}$ Operating Temperature $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$   | Туре                                 | General Purpose                |
| Inputs - Side 1/Side 25/1Channel TypeUnidirectionalVoltage - Isolation5000VrmsCommon Mode Transient Immunity (Min)35kV/μsData Rate150MbpsPropagation Delay tpLH / tpHL (Max)13ns, 13nsPulse Width Distortion (Max)4.5nsRise / Fall Time (Typ)2.5ns, 2.5nsVoltage - Supply2.5 V ~ 5.5 VOperating Temperature-40°C ~ 125°C   | Isolated Power                       | No                             |
| Channel Type Unidirectional Voltage - Isolation 5000Vrms  Common Mode Transient Immunity (Min) 35kV/ $\mu$ s  Data Rate 150Mbps  Propagation Delay tpLH / tpHL (Max) 13ns, 13ns  Pulse Width Distortion (Max) 4.5ns  Rise / Fall Time (Typ) 2.5ns, 2.5ns  Voltage - Supply 2.5 V ~ 5.5 V  Operating Temperature -40°C ~ 125°C  | Number of Channels                   | 6                              |
| Voltage - Isolation 5000Vrms  Common Mode Transient Immunity (Min) 35kV/ $\mu$ s  Data Rate 150Mbps  Propagation Delay tpLH / tpHL (Max) 13ns, 13ns  Pulse Width Distortion (Max) 4.5ns  Rise / Fall Time (Typ) 2.5ns, 2.5ns  Voltage - Supply 2.5 V ~ 5.5 V  Operating Temperature -40°C ~ 125°C  | Inputs - Side 1/Side 2               | 5/1                            |
| Common Mode Transient Immunity (Min) 35kV/ $\mu$ s  Data Rate 150Mbps  Propagation Delay tpLH / tpHL (Max) 13ns, 13ns  Pulse Width Distortion (Max) 4.5ns  Rise / Fall Time (Typ) 2.5ns, 2.5ns  Voltage - Supply 2.5 V ~ 5.5 V  Operating Temperature -40°C ~ 125°C  | Channel Type                         | Unidirectional                 |
| Data Rate150MbpsPropagation Delay tpLH / tpHL (Max)13ns, 13nsPulse Width Distortion (Max)4.5nsRise / Fall Time (Typ)2.5ns, 2.5nsVoltage - Supply2.5 V ~ 5.5 VOperating Temperature-40°C ~ 125°C  | Voltage - Isolation                  | 5000Vrms                       |
| Propagation Delay tpLH / tpHL (Max) 13ns, 13ns  Pulse Width Distortion (Max) 4.5ns  Rise / Fall Time (Typ) 2.5ns, 2.5ns  Voltage - Supply 2.5 $V \sim 5.5 V$ Operating Temperature -40°C ~ 125°C   | Common Mode Transient Immunity (Min) | 35kV/µs                        |
| Pulse Width Distortion (Max) $4.5 \text{ns}$ Rise / Fall Time (Typ) $2.5 \text{ns}, 2.5 \text{ns}$ Voltage - Supply $2.5 \text{ V} \sim 5.5 \text{ V}$ Operating Temperature $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$  | Data Rate                            | 150Mbps                        |
| Rise / Fall Time (Typ) 2.5ns, 2.5ns<br>Voltage - Supply 2.5 V $\sim$ 5.5 V<br>Operating Temperature -40°C $\sim$ 125°C   | Propagation Delay tpLH / tpHL (Max)  | 13ns, 13ns                     |
| Voltage - Supply $2.5 \text{ V} \sim 5.5 \text{ V}$<br>Operating Temperature $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$  | Pulse Width Distortion (Max)         | 4.5ns                          |
| Operating Temperature $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$   | Rise / Fall Time (Typ)               | 2.5ns, 2.5ns                   |
|  | Voltage - Supply                     | 2.5 V ~ 5.5 V                  |
| Package / Case 16-SOIC (0.295", 7.50mm Width)  | Operating Temperature                | -40°C ~ 125°C                  |
|  | Package / Case                       | 16-SOIC (0.295", 7.50mm Width) |
| Supplier Device Package 16-SOIC  | Supplier Device Package              | 16-SOIC                        |
| Report errors?   |                                      | Report errors?                 |

#### SI8661BD-B-ISR Guarantees



#### **Quality Guarantees**

We provide 90 days warranty. \*

If the items you received were not in perfect quality, we would be responsible for your refund or replacement, but the items must be returned in their original condition.



#### **Service Guarantees**

We guarantee 100% customer satisfaction.

Our experienced sales team and tech support team back our services to satisfy all our customers.

## SI8661BD-B-ISR Payment Methods





















## SI8661BD-B-ISR Shipping Methods













If you have any question about SI8661BD-B-ISR, please do not hesitate to contact us!

Website: https://www.heisener.com E-mail: salesdept@heisener.com