



SI8642BD-B-ISR Information



For Reference Only

Part NumberSI8642BD-B-ISRManufacturerSilicon LabsCategoryIsolators

Digital Isolators

Description DGTL ISO 5KV 4CH 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



Request a Quote

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.









SI8642BD-B-ISR Specifications

Manufacturer Part Number \$18642BD-B-ISR Manufacturer Silicon 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 4 Inputs - Side 1/Side 2 2/2 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) Supplier Device Package 16-SOIC		
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 4 Inputs - Side 1/Side 2 2/2 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) Supplier Device Package 16-SOIC	Manufacturer Part Number	SI8642BD-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 4 Inputs - Side 1/Side 2 2/2 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) Supplier Device Package 16-SOIC	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 4 Inputs - Side 1/Side 2 2/2 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) Supplier Device Package 16-SOIC	Category	Isolators
SeriesAutomotive, AEC-Q100TechnologyCapacitive CouplingTypeGeneral PurposeIsolated PowerNoNumber of Channels4Inputs - Side 1/Side 22/2Channel 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°CPackage / Case16-SOIC (0.295", 7.50mm Width)Supplier Device Package16-SOIC		Digital Isolators
TechnologyCapacitive CouplingTypeGeneral PurposeIsolated PowerNoNumber of Channels4Inputs - Side 1/Side 22/2Channel 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°CPackage / Case16-SOIC (0.295", 7.50mm Width)Supplier Device Package16-SOIC	Package	16-SOIC (0.295", 7.50mm Width)
TypeGeneral PurposeIsolated PowerNoNumber of Channels4Inputs - Side 1/Side 22/2Channel 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°CPackage / Case16-SOIC (0.295", 7.50mm Width)Supplier Device Package16-SOIC	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 -40°C ~ 125°C Package / Case 16-SOIC No Unidirectional Volidirectional 101 101 101 101 101 101 101 1	Technology	Capacitive Coupling
Number of Channels4Inputs - Side 1/Side 22/2Channel 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°CPackage / Case16-SOIC (0.295", 7.50mm Width)Supplier Device Package16-SOIC	Туре	General Purpose
Inputs - Side 1/Side 2 Channel Type Unidirectional Voltage - Isolation 5000Vrms Common Mode Transient Immunity (Min) Data Rate 150Mbps Propagation Delay tpLH / tpHL (Max) Pulse Width Distortion (Max) Rise / Fall Time (Typ) 2.5ns, 2.5ns Voltage - Supply Operating Temperature -40°C ~ 125°C Package / Case 16-SOIC (0.295", 7.50mm Width) Supplier Device Package	Isolated Power	No
Channel Type Voltage - Isolation Common Mode Transient Immunity (Min) Data Rate Data Rate 150Mbps Propagation Delay tpLH / tpHL (Max) Pulse Width Distortion (Max) Rise / Fall Time (Typ) Voltage - Supply Operating Temperature Package / Case 16-SOIC (0.295", 7.50mm Width) Supplier Device Package	Number of Channels	4
Voltage - Isolation 5000Vrms Common Mode Transient Immunity (Min) 35kV/ μ 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 Package / Case 16-SOIC (0.295", 7.50mm Width) Supplier Device Package 16-SOIC	Inputs - Side 1/Side 2	2/2
Common Mode Transient Immunity (Min) Data Rate 150Mbps Propagation Delay tpLH / tpHL (Max) Pulse Width Distortion (Max) Rise / Fall Time (Typ) 2.5 ns, 2.5 ns Voltage - Supply Operating Temperature -40°C ~ 125°C Package / Case 16-SOIC (0.295", 7.50mm Width) Supplier Device Package	Channel Type	Unidirectional
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) Supplier Device Package 16-SOIC	Voltage - Isolation	5000Vrms
Propagation Delay tpLH / tpHL (Max) Pulse Width Distortion (Max) Rise / Fall Time (Typ) 2.5ns, 2.5ns Voltage - Supply Operating Temperature Package / Case 16-SOIC (0.295", 7.50mm Width) 13ns, 13ns 4.5ns 2.5ns, 2.5ns 2.5ns, 2.5ns 16-SOIC (0.295", 7.50mm Width)	Common Mode Transient Immunity (Min)	35kV/μs
Pulse Width Distortion (Max) 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) Supplier Device Package	Data Rate	150Mbps
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 $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$ Package / Case 16-SOIC (0.295° , 7.50mm Width)Supplier Device Package 16-SOIC	Propagation Delay tpLH / tpHL (Max)	13ns, 13ns
Voltage - Supply $2.5 \text{ V} \sim 5.5 \text{ V}$ Operating Temperature $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$ Package / Case $16\text{-SOIC} (0.295'', 7.50 \text{mm Width})$ Supplier Device Package 16-SOIC	Pulse Width Distortion (Max)	4.5ns
Operating Temperature $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$ Package / Case 16-SOIC (0.295", 7.50mm Width) Supplier Device Package 16-SOIC	Rise / Fall Time (Typ)	2.5ns, 2.5ns
Package / Case 16-SOIC (0.295", 7.50mm Width) Supplier Device Package 16-SOIC	Voltage - Supply	2.5 V ~ 5.5 V
Supplier Device Package 16-SOIC	Operating Temperature	-40°C ~ 125°C
	Package / Case	16-SOIC (0.295", 7.50mm Width)
	Supplier Device Package	16-SOIC
Report errors?		Report errors?

SI8642BD-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.

SI8642BD-B-ISR Payment Methods



















SI8642BD-B-ISR Shipping Methods













If you have any question about SI8642BD-B-ISR, please do not hesitate to contact us!

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