



#### SI8431AB-C-IS1R Information

Part Number SI8431AB-C-IS1R

ManufacturerSilicon LabsCategoryIsolators

Digital Isolators

**Description** DGTL ISO 2.5KV GEN PURP 16SOIC **Package** 16-SOIC (0.154", 3.90mm Width)

For the pricing/inventory/lead time, please contact

us

For Reference Only

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



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# **Certified Quality**

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## SI8431AB-C-IS1R Specifications

Manufacturer Part Number         SI8431AB-C-IS1R           Manufacturer         Silicon Labs           Category         Isolators           Package         16-SOIC (0.154", 3.90mm Width)           Series         Automotive, AEC-Q100           Technology         Capacitive Coupling           Type         General Purpose           Isolated Power         No           Number of Channels         3           Inputs - Side 1/Side 2         2/1           Channel Type         Unidirectional           Voltage - Isolation         256V/μs (Typ)           Data Rate         IMbps           Propagation Delay tpLH / tpHL (Max)         35ns, 35ns           Pulse Width Distortion (Max)         25ns           Rise / Fall Time (Typ)         3.8ns, 2.8ns           Voltage - Supply         2.7 V ~ 5.5 V           Operating Temperature         -40°C ~ 125°C           Package / Case         16-SOIC (0.154", 3.90mm Width)           Supplier Device Package         16-SOIC		
Category         Isolators           Package         16-SOIC (0.154", 3.90mm Width)           Series         Automotive, AEC-Q100           Technology         Capacitive Coupling           Type         General Purpose           Isolated Power         No           Number of Channels         3           Inputs - Side 1/Side 2         2/1           Channel Type         Unidirectional           Voltage - Isolation         2500Vrms           Common Mode Transient Immunity (Min)         25kV/μs (Typ)           Data Rate         1Mbps           Propagation Delay tpLH / tpHL (Max)         35ns, 35ns           Pulse Width Distortion (Max)         25ns           Rise / Fall Time (Typ)         3.8ns, 2.8ns           Voltage - Supply         2.7 V ~ 5.5 V           Operating Temperature         -40°C ~ 125°C           Package / Case         16-SOIC (0.154", 3.90mm Width)	Manufacturer Part Number	SI8431AB-C-IS1R
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TechnologyCapacitive CouplingTypeGeneral PurposeIsolated PowerNoNumber of Channels3Inputs - Side 1/Side 22/1Channel TypeUnidirectionalVoltage - Isolation2500VrmsCommon Mode Transient Immunity (Min)25kV/μs (Typ)Data Rate1MbpsPropagation Delay tpLH / tpHL (Max)35ns, 35nsPulse Width Distortion (Max)25nsRise / Fall Time (Typ)3.8ns, 2.8nsVoltage - Supply2.7 V ~ 5.5 VOperating Temperature-40°C ~ 125°CPackage / Case16-SOIC (0.154", 3.90mm Width)	Package	16-SOIC (0.154", 3.90mm Width)
TypeGeneral PurposeIsolated PowerNoNumber of Channels3Inputs - Side 1/Side 22/1Channel TypeUnidirectionalVoltage - Isolation2500VrmsCommon Mode Transient Immunity (Min)25kV/μs (Typ)Data Rate1MbpsPropagation Delay tpLH / tpHL (Max)35ns, 35nsPulse Width Distortion (Max)25nsRise / Fall Time (Typ)3.8ns, 2.8nsVoltage - Supply2.7 V ~ 5.5 VOperating Temperature-40°C ~ 125°CPackage / Case16-SOIC (0.154", 3.90mm Width)	Series	Automotive, AEC-Q100
Isolated PowerNoNumber of Channels3Inputs - Side 1/Side 2 $2/1$ Channel TypeUnidirectionalVoltage - Isolation $2500Vrms$ Common Mode Transient Immunity (Min) $25kV/\mu s$ (Typ)Data Rate $1Mbps$ Propagation Delay tpLH / tpHL (Max) $35ns$ , $35ns$ Pulse Width Distortion (Max) $25ns$ Rise / Fall Time (Typ) $3.8ns$ , $2.8ns$ Voltage - Supply $2.7 V \sim 5.5 V$ Operating Temperature $-40^{\circ}C \sim 125^{\circ}C$ Package / Case $16-SOIC$ ( $0.154^{**}$ , $3.90mm$ Width)	Technology	Capacitive Coupling
Number of Channels3Inputs - Side 1/Side 2 $2/1$ Channel TypeUnidirectionalVoltage - Isolation $2500Vrms$ Common Mode Transient Immunity (Min) $25kV/\mu s$ (Typ)Data Rate $1Mbps$ Propagation Delay tpLH / tpHL (Max) $35ns$ , $35ns$ Pulse Width Distortion (Max) $25ns$ Rise / Fall Time (Typ) $3.8ns$ , $2.8ns$ Voltage - Supply $2.7 V \sim 5.5 V$ Operating Temperature $-40^{\circ}C \sim 125^{\circ}C$ Package / Case $16-SOIC$ ( $0.154^{\circ}$ , $3.90mm$ Width)	Type	General Purpose
Inputs - Side 1/Side 2 2/1  Channel Type Unidirectional  Voltage - Isolation 2500Vrms  Common Mode Transient Immunity (Min) 25kV/ $\mu$ s (Typ)  Data Rate 1Mbps  Propagation Delay tpLH / tpHL (Max) 35ns, 35ns  Pulse Width Distortion (Max) 25ns  Rise / Fall Time (Typ) 3.8ns, 2.8ns  Voltage - Supply 2.7 V ~ 5.5 V  Operating Temperature -40°C ~ 125°C  Package / Case 16-SOIC (0.154", 3.90mm Width)	Isolated Power	No
Channel Type  Unidirectional  Voltage - Isolation  2500Vrms  Common Mode Transient Immunity (Min)  Data Rate  1Mbps  Propagation Delay tpLH / tpHL (Max)  Propagation Max)  Rise / Fall Time (Typ)  3.8ns, 2.8ns  Voltage - Supply  Operating Temperature  -40°C ~ 125°C  Package / Case  Unidirectional  25ns  Sans, 25ns  16-SOIC (0.154", 3.90mm Width)	Number of Channels	3
Voltage - Isolation  Common Mode Transient Immunity (Min)  Data Rate  1Mbps  Propagation Delay tpLH / tpHL (Max)  Pulse Width Distortion (Max)  Rise / Fall Time (Typ)  Voltage - Supply  Operating Temperature  Package / Case  2500Vrms  25kV/µs (Typ)  1Mbps  25kV/µs (Typ)  35ns, 35ns  25ns  25ns  25ns  25ns  25ns  16-SOIC (0.154", 3.90mm Width)	Inputs - Side 1/Side 2	2/1
Common Mode Transient Immunity (Min) 25kV/ $\mu$ s (Typ)  Data Rate 1Mbps  Propagation Delay tpLH / tpHL (Max) 35ns, 35ns  Pulse Width Distortion (Max) 25ns  Rise / Fall Time (Typ) 3.8ns, 2.8ns  Voltage - Supply 2.7 V ~ 5.5 V  Operating Temperature -40°C ~ 125°C  Package / Case 16-SOIC (0.154", 3.90mm Width)	Channel Type	Unidirectional
Data Rate  Propagation Delay tpLH / tpHL (Max)  Pulse Width Distortion (Max)  Rise / Fall Time (Typ)  Voltage - Supply  Operating Temperature  Package / Case  1Mbps  35ns, 35ns  25ns  3.8ns, 2.8ns  2.7 V ~ 5.5 V  -40°C ~ 125°C  16-SOIC (0.154", 3.90mm Width)	Voltage - Isolation	2500Vrms
Propagation Delay tpLH / tpHL (Max)  Pulse Width Distortion (Max)  Rise / Fall Time (Typ)  25ns  Voltage - Supply  2.7 V ~ 5.5 V  Operating Temperature  Package / Case  16-SOIC (0.154", 3.90mm Width)	Common Mode Transient Immunity (Min)	25kV/μs (Typ)
Pulse Width Distortion (Max)  Rise / Fall Time (Typ)  3.8ns, 2.8ns  Voltage - Supply  2.7 V ~ 5.5 V  Operating Temperature  -40°C ~ 125°C  Package / Case  16-SOIC (0.154", 3.90mm Width)	Data Rate	1Mbps
Rise / Fall Time (Typ) 3.8ns, 2.8ns Voltage - Supply 2.7 V $\sim$ 5.5 V Operating Temperature -40°C $\sim$ 125°C Package / Case 16-SOIC (0.154", 3.90mm Width)	Propagation Delay tpLH / tpHL (Max)	35ns, 35ns
Voltage - Supply $ 2.7 \text{ V} \sim 5.5 \text{ V} $ Operating Temperature $ -40^{\circ}\text{C} \sim 125^{\circ}\text{C} $ Package / Case $ 16\text{-SOIC } (0.154^{\circ}, 3.90 \text{mm Width}) $	Pulse Width Distortion (Max)	25ns
Operating Temperature $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$ Package / Case $16\text{-SOIC}$ (0.154", 3.90mm Width)	Rise / Fall Time (Typ)	3.8ns, 2.8ns
Package / Case 16-SOIC (0.154", 3.90mm Width)	Voltage - Supply	2.7 V ~ 5.5 V
•	Operating Temperature	-40°C ~ 125°C
Supplier Device Package 16-SOIC	Package / Case	16-SOIC (0.154", 3.90mm Width)
	Supplier Device Package	16-SOIC
Report errors?		Report errors?

#### SI8431AB-C-IS1R 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.

#### SI8431AB-C-IS1R Payment Methods





















## SI8431AB-C-IS1R Shipping Methods













If you have any question about SI8431AB-C-IS1R, please do not hesitate to contact us!

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