



### **ISL43741IR Information**

Part Number ISL43741IR

ManufacturerRenesas Electronics AmericaCategoryIntegrated Circuits (ICs)

Interface - Analog Switches, Multiplexers,

**Demultiplexers** 

**Description** IC MUX/DEMUX DUAL 4X1 20QFN

Package 20-VFQFN Exposed Pad

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**

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# **ISL43741IR Specifications**

Manufacturer Part Number         ISL43741IR           Manufacturer         Renesas Electronics America           Category         Integrated Circuits (ICs)           Interface - Analog Switches, Multiplexers, Demultiplexers           Package         20-VFQFN Exposed Pad           Series         -           Switch Circuit         SP4T           Multiplexer/Demultiplexer Circuit         4:1           Number of Circuits         2           On-State Resistance (Max)         60 Ohm           Channel-to-Channel Matching (Ron)         1.3 Ohm           Voltage - Supply, Single (V+)         2.7 V ~ 12 V           Voltage - Supply, Dual (V±)         ±2 V ~ 6 V           Switch Time (Ton, Toff) (Max)         50ns, 35ns           -3db Bandwidth         -           -Charge Injection         0.3pC           Channel Capacitance (CS(off), CD(off))         3pF, 12pF           Current - Leakage (IS(off)) (Max)         100pA           Crosstalk         -110dB @ 100kHz           Operating Temperature         -40°C ~ 85°C (TA)           Package / Case         20-VFQFN Exposed Pad           Supplier Device Package         20-QFN-EP (4x4)	<b>4</b>	
Category         Integrated Circuits (ICs)           Package         20-VFQFN Exposed Pad           Series         -           Switch Circuit         SP4T           Multiplexer/Demultiplexer Circuit         4:1           Number of Circuits         2           On-State Resistance (Max)         60 Ohm           Channel-to-Channel Matching (Ron)         1.3 Ohm           Voltage - Supply, Single (V+)         2.7 V ~ 12 V           Voltage - Supply, Dual (V±)         ±2 V ~ 6 V           Switch Time (Ton, Toff) (Max)         50ns, 35ns           -3db Bandwidth         -           Charge Injection         0.3pC           Channel Capacitance (CS(off), CD(off))         3pF, 12pF           Current - Leakage (IS(off)) (Max)         100pA           Crosstalk         -110dB @ 100kHz           Operating Temperature         -40°C ~ 85°C (TA)           Package / Case         20-VFQFN Exposed Pad           Supplier Device Package         20-QFN-EP (4x4)	Manufacturer Part Number	ISL43741IR
Interface - Analog Switches, Multiplexers, Demultiplexers  Package 20-VFQFN Exposed Pad  Series - Switch Circuit SP4T  Multiplexer/Demultiplexer Circuit 4:1  Number of Circuits 2  On-State Resistance (Max) 60 Ohm  Channel-to-Channel Matching (Ron) 1.3 Ohm  Voltage - Supply, Single (V+) 2.7 V ~ 12 V  Voltage - Supply, Dual (V±) ±2 V ~ 6 V  Switch Time (Ton, Toff) (Max) 50ns, 35ns  -3db Bandwidth - Charge Injection 0.3pC  Channel Capacitance (CS(off), CD(off)) 3pF, 12pF  Current - Leakage (IS(off)) (Max) 100pA  Crosstalk -110dB @ 100kHz  Operating Temperature -40°C ~ 85°C (TA)  Package / Case 20-VFQFN Exposed Pad  Supplier Device Package 20-QFN-EP (4x4)	Manufacturer	Renesas Electronics America
Package         20-VFQFN Exposed Pad           Series         -           Switch Circuit         SP4T           Multiplexer/Demultiplexer Circuit         4:1           Number of Circuits         2           On-State Resistance (Max)         60 Ohm           Channel-to-Channel Matching (Ron)         1.3 Ohm           Voltage - Supply, Single (V+)         2.7 V ~ 12 V           Voltage - Supply, Dual (V±)         ±2 V ~ 6 V           Switch Time (Ton, Toff) (Max)         50ns, 35ns           -3db Bandwidth         -           Charge Injection         0.3pC           Channel Capacitance (CS(off), CD(off))         3pF, 12pF           Current - Leakage (IS(off)) (Max)         100pA           Crosstalk         -110dB @ 100kHz           Operating Temperature         -40°C ~ 85°C (TA)           Package / Case         20-VFQFN Exposed Pad           Supplier Device Package         20-QFN-EP (4x4)	Category	Integrated Circuits (ICs)
Series         -           Switch Circuit         SP4T           Multiplexer/Demultiplexer Circuit         4:1           Number of Circuits         2           On-State Resistance (Max)         60 Ohm           Channel-to-Channel Matching (Ron)         1.3 Ohm           Voltage - Supply, Single (V+)         2.7 V ~ 12 V           Voltage - Supply, Dual (V±)         ±2 V ~ 6 V           Switch Time (Ton, Toff) (Max)         50ns, 35ns           -3db Bandwidth         -           Charge Injection         0.3pC           Channel Capacitance (CS(off), CD(off))         3pF, 12pF           Current - Leakage (IS(off)) (Max)         100pA           Crosstalk         -110dB @ 100kHz           Operating Temperature         -40°C ~ 85°C (TA)           Package / Case         20-VFQFN Exposed Pad           Supplier Device Package         20-QFN-EP (4x4)		Interface - Analog Switches, Multiplexers, Demultiplexers
Switch Circuit  Multiplexer/Demultiplexer Circuit  A:1  Number of Circuits  Con-State Resistance (Max)  Channel-to-Channel Matching (Ron)  Voltage - Supply, Single (V+)  Voltage - Supply, Dual (V±)  **Example of Circuits  Channel Time (Ton, Toff) (Max)  Sons, 35ns  -3db Bandwidth  - Charge Injection  Channel Capacitance (CS(off), CD(off))  Current - Leakage (IS(off)) (Max)  100pA  Crosstalk  -110dB @ 100kHz  Operating Temperature  -40°C ~ 85°C (TA)  Package / Case  20-VFQFN Exposed Pad  Supplier Device Package	Package	20-VFQFN Exposed Pad
Multiplexer/Demultiplexer Circuit  Number of Circuits  2  On-State Resistance (Max)  60 Ohm  Channel-to-Channel Matching (Ron)  1.3 Ohm  Voltage - Supply, Single (V+)  2.7 V ~ 12 V  Voltage - Supply, Dual (V±)  \$\frac{\pmatrix}{2} \times \frac{\pmatrix}{2} \times \pmatrix	Series	-
Number of Circuits         2           On-State Resistance (Max)         60 Ohm           Channel-to-Channel Matching (Ron)         1.3 Ohm           Voltage - Supply, Single (V+)         2.7 V ~ 12 V           Voltage - Supply, Dual (V±)         ±2 V ~ 6 V           Switch Time (Ton, Toff) (Max)         50ns, 35ns           -3db Bandwidth         -           Charge Injection         0.3pC           Channel Capacitance (CS(off), CD(off))         3pF, 12pF           Current - Leakage (IS(off)) (Max)         100pA           Crosstalk         -110dB @ 100kHz           Operating Temperature         -40°C ~ 85°C (TA)           Package / Case         20-VFQFN Exposed Pad           Supplier Device Package         20-QFN-EP (4x4)	Switch Circuit	SP4T
On-State Resistance (Max) Channel-to-Channel Matching (Ron) 1.3 Ohm Voltage - Supply, Single (V+) 2.7 V ~ 12 V  Voltage - Supply, Dual (V±) 50ns, 35ns -3db Bandwidth - Charge Injection 0.3pC Channel Capacitance (CS(off), CD(off)) 3pF, 12pF Current - Leakage (IS(off)) (Max) 100pA  Crosstalk -110dB @ 100kHz Operating Temperature -40°C ~ 85°C (TA)  Package / Case Supplier Device Package 20-VFQFN Exposed Pad	Multiplexer/Demultiplexer Circuit	4:1
Channel-to-Channel Matching (Ron)  Voltage - Supply, Single (V+)  2.7 V ~ 12 V  Voltage - Supply, Dual (V±)  \$\frac{\pmatch{\text{2}}{2}\text{V} \sigma 6 \text{V}}{6}\text{V}}{\text{Switch Time (Ton, Toff) (Max)}}  50ns, 35ns  -3db Bandwidth  - Charge Injection  Channel Capacitance (CS(off), CD(off))  3pF, 12pF  Current - Leakage (IS(off)) (Max)  100pA  Crosstalk  -110dB @ 100kHz  Operating Temperature  -40°C ~ 85°C (TA)  Package / Case  20-VFQFN Exposed Pad  Supplier Device Package	Number of Circuits	2
Voltage - Supply, Single (V+) 2.7 V ~ 12 V   Voltage - Supply, Dual (V $\pm$ ) $\pm$ 2 V ~ 6 V   Switch Time (Ton, Toff) (Max) 50ns, 35ns   -3db Bandwidth -   Charge Injection 0.3pC   Channel Capacitance (CS(off), CD(off)) 3pF, 12pF   Current - Leakage (IS(off)) (Max) 100pA   Crosstalk -110dB @ 100kHz   Operating Temperature -40°C ~ 85°C (TA)   Package / Case 20-VFQFN Exposed Pad   Supplier Device Package 20-QFN-EP (4x4)	On-State Resistance (Max)	60 Ohm
Voltage - Supply, Dual (V±) ±2 V ~ 6 V  Switch Time (Ton, Toff) (Max) 50ns, 35ns  -3db Bandwidth -  Charge Injection 0.3pC  Channel Capacitance (CS(off), CD(off)) 3pF, 12pF  Current - Leakage (IS(off)) (Max) 100pA  Crosstalk -110dB @ 100kHz  Operating Temperature -40°C ~ 85°C (TA)  Package / Case 20-VFQFN Exposed Pad  Supplier Device Package 20-QFN-EP (4x4)	Channel-to-Channel Matching (Ron)	1.3 Ohm
Switch Time (Ton, Toff) (Max)  -3db Bandwidth  - Charge Injection  Channel Capacitance (CS(off), CD(off))  Current - Leakage (IS(off)) (Max)  Crosstalk  -110dB @ 100kHz  Operating Temperature  -40°C ~ 85°C (TA)  Package / Case  20-VFQFN Exposed Pad  Supplier Device Package	Voltage - Supply, Single (V+)	2.7 V ~ 12 V
-3db Bandwidth - 0.3pC  Charge Injection 0.3pC  Channel Capacitance (CS(off), CD(off)) 3pF, 12pF  Current - Leakage (IS(off)) (Max) 100pA  Crosstalk -110dB @ 100kHz  Operating Temperature -40°C ~ 85°C (TA)  Package / Case 20-VFQFN Exposed Pad  Supplier Device Package 20-QFN-EP (4x4)	Voltage - Supply, Dual (V±)	±2 V ~ 6 V
Charge Injection  Channel Capacitance (CS(off), CD(off))  3pF, 12pF  Current - Leakage (IS(off)) (Max)  100pA  Crosstalk  -110dB @ 100kHz  Operating Temperature  -40°C ~ 85°C (TA)  Package / Case  20-VFQFN Exposed Pad  Supplier Device Package  20-QFN-EP (4x4)	Switch Time (Ton, Toff) (Max)	50ns, 35ns
Channel Capacitance (CS(off), CD(off))  3pF, 12pF  Current - Leakage (IS(off)) (Max)  100pA  -110dB @ 100kHz  Operating Temperature  -40°C ~ 85°C (TA)  Package / Case  20-VFQFN Exposed Pad  Supplier Device Package  20-QFN-EP (4x4)	-3db Bandwidth	-
Current - Leakage (IS(off)) (Max)  Crosstalk  -110dB @ 100kHz  Operating Temperature  -40°C ~ 85°C (TA)  Package / Case  20-VFQFN Exposed Pad  Supplier Device Package  20-QFN-EP (4x4)	Charge Injection	0.3pC
Crosstalk $-110dB @ 100kHz$ Operating Temperature $-40^{\circ}C \sim 85^{\circ}C$ (TA)  Package / Case $20\text{-VFQFN Exposed Pad}$ Supplier Device Package $20\text{-QFN-EP (4x4)}$	Channel Capacitance (CS(off), CD(off))	3pF, 12pF
Operating Temperature-40°C ~ 85°C (TA)Package / Case20-VFQFN Exposed PadSupplier Device Package20-QFN-EP (4x4)	Current - Leakage (IS(off)) (Max)	100pA
Package / Case 20-VFQFN Exposed Pad Supplier Device Package 20-QFN-EP (4x4)	Crosstalk	-110dB @ 100kHz
Supplier Device Package 20-QFN-EP (4x4)	Operating Temperature	-40°C ~ 85°C (TA)
	Package / Case	20-VFQFN Exposed Pad
Report errors?	Supplier Device Package	20-QFN-EP (4x4)
		Report errors?

#### **ISL43741IR 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.

## **ISL43741IR Payment Methods**





















# **ISL43741IR Shipping Methods**













If you have any question about ISL43741IR, please do not hesitate to contact us!

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