

SILICON LABS Digital Isolators

RoHS Compliant This product is RoHS compliant.



ISOPRO UNIDIRECTIONAL DIGITAL ISOLATORS

Features:

- 5kV, 2.5kV and 1kV isolation ratings
- High integration: up to 6 isolation channels in a single package
- High-speed operation: DC-150Mbps
- Wide operating supply voltage: 2.7V-5.5V
- Low power
- Transient immunity: >25kV/μs
- No start-up initialization required
- Precise timing
- Less than 10ns propagation delay
- -2 ns pulse width distortion
- -1 ns channel-channel matching
- -2 ns pulse width skew
- Enable controlled outputs
- DC correct

Applications:

- Example circuit applications
- Isolation
- Level shifting
- Ground loop elimination
- Example end applications
- Isolated analog data acquisition
- Operator interface controls
- AC-DC and dc-dc switching supplies
- Plasma TVs
- USB/CAN/PC networks
- Isolated point-to-point communications
- Motor control
- UPS systems



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Silicon Labs Part No.	Package	Forward Data Channels	Reverse Data Channels	Max. Data Rate (Mbps)	Insulation Rating	Default Output State	Temp. Range (°C)	Price Each					
									1	25	100	1000		
1.0kV														
634-SI8440AA-D-IS1	SI8440AA-D-IS1	NB SOIC-16	4	0	1	1.0kV	L	-40 to +125	1.89	1.77	1.55	1.44		
634-SI8440BA-D-IS1	SI8440BA-D-IS1	NB SOIC-16	4	0	150	1.0kV	L	-40 to +125	2.77	2.59	2.27	2.10		
634-SI8441AA-D-IS1	SI8441AA-D-IS1	NB SOIC-16	3	1	1	1.0kV	L	-40 to +125	1.89	1.77	1.55	1.44		
634-SI8441BA-D-IS1	SI8441BA-D-IS1	NB SOIC-16	3	1	150	1.0kV	L	-40 to +125	2.77	2.59	2.27	2.10		
634-SI8442AA-D-IS1	SI8442AA-D-IS1	NB SOIC-16	2	2	1	1.0kV	L	-40 to +125	1.89	1.77	1.55	1.44		
634-SI8442BA-D-IS1	SI8442BA-D-IS1	NB SOIC-16	2	2	150	1.0kV	L	-40 to +125	2.77	2.59	2.27	2.10		
634-SI8442BA-D-IU	SI8442BA-D-IU	QSOP-16	2	2	150	1.0kV	L	-40 to +125	2.84	2.33	2.16	1.98		
634-SI8450AA-B-IS1	SI8450AA-B-IS1	NB SOIC-16	5	0	1	1.0kV	L	-40 to +125	2.12	1.98	1.74	1.61		
634-SI8450BA-B-IS1	SI8450BA-B-IS1	NB SOIC-16	5	0	150	1.0kV	L	-40 to +125	3.12	2.91	2.56	2.37		
634-SI8451AA-B-IS1	SI8451AA-B-IS1	NB SOIC-16	4	1	1	1.0kV	L	-40 to +125	2.12	1.98	1.74	1.61		
634-SI8451BA-B-IS1	SI8451BA-B-IS1	NB SOIC-16	4	1	150	1.0kV	L	-40 to +125	3.12	2.91	2.56	2.37		
634-SI8452AA-B-IS1	SI8452AA-B-IS1	NB SOIC-16	3	2	1	1.0kV	L	-40 to +125	2.12	1.98	1.74	1.61		
634-SI8452BA-B-IS1	SI8452BA-B-IS1	NB SOIC-16	3	2	150	1.0kV	L	-40 to +125	3.12	2.91	2.56	2.37		
634-SI8460AA-B-IS1	SI8460AA-B-IS1	NB SOIC-16	6	0	1	1.0kV	L	-40 to +125	2.36	2.21	1.94	1.80		
634-SI8461AA-B-IS1	SI8461AA-B-IS1	NB SOIC-16	5	1	1	1.0kV	L	-40 to +125	2.36	2.21	1.94	1.80		
634-SI8461BA-B-IS1	SI8461BA-B-IS1	NB SOIC-16	5	1	150	1.0kV	L	-40 to +125	3.49	3.26	2.86	2.65		
634-SI8462AA-B-IS1	SI8462AA-B-IS1	NB SOIC-16	4	2	1	1.0kV	L	-40 to +125	2.36	2.21	1.94	1.80		
634-SI8462BA-B-IS1	SI8462BA-B-IS1	NB SOIC-16	4	2	150	1.0kV	L	-40 to +125	3.49	3.26	2.86	2.65		
634-SI8463AA-B-IS1	SI8463AA-B-IS1	NB SOIC-16	3	3	1	1.0kV	L	-40 to +125	2.36	2.21	1.94	1.80		
634-SI8463BA-B-IS1	SI8463BA-B-IS1	NB SOIC-16	3	3	150	1.0kV	L	-40 to +125	3.49	3.26	2.86	2.65		
2.5kV														
634-SI8410AB-D-IS	SI8410AB-D-IS	NB SOIC-8	1	0	1	2.5kV	L	-40 to +125	1.14	1.06	.936	.866		
634-SI8410BB-D-IS	SI8410BB-D-IS	NB SOIC-8	1	0	150	2.5kV	L	-40 to +125	1.66	1.55	1.36	1.26		
634-SI8420BB-D-IS	SI8420BB-D-IS	NB SOIC-8	2	0	150	2.5kV	L	-40 to +125	1.70	1.59	1.39	1.29		
634-SI8421AB-D-IS	SI8421AB-D-IS	NB SOIC-8	1	1	1	2.5kV	L	-40 to +125	1.17	1.09	.964	.893		
634-SI8421BB-D-IS	SI8421BB-D-IS	NB SOIC-8	1	1	150	2.5kV	L	-40 to +125	1.70	1.59	1.39	1.29		
634-SI8430AB-D-IS	SI8430AB-D-IS	WB SOIC-16	3	0	1	2.5kV	L	-40 to +125	1.68	1.57	1.38	1.28		
634-SI8430BB-D-IS	SI8430BB-D-IS	WB SOIC-16	3	0	150	2.5kV	L	-40 to +125	2.52	2.36	2.07	1.92		
634-SI8431AB-D-IS	SI8431AB-D-IS	WB SOIC-16	2	1	1	2.5kV	L	-40 to +125	1.68	1.57	1.38	1.28		
634-SI8431BB-D-IS	SI8431BB-D-IS	WB SOIC-16	2	1	150	2.5kV	L	-40 to +125	2.52	2.36	2.07	1.92		
634-SI8431BB-D-IS1	SI8431BB-D-IS1	NB SOIC-16	2	1	150	2.5kV	L	-40 to +125	2.40	2.24	1.97	1.82		
634-SI8435BB-D-IS	SI8435BB-D-IS	WB SOIC-16	3	0	150	2.5kV	L	-40 to +125	2.52	2.36	2.07	1.92		
634-SI8435BB-D-IS1	SI8435BB-D-IS1	NB SOIC-16	3	0	150	2.5kV	L	-40 to +125	2.40	2.24	1.97	1.82		
634-SI8440AB-D-IS	SI8440AB-D-IS	WB SOIC-16	4	0	1	2.5kV	L	-40 to +125	2.10	1.96	1.72	1.60		
634-SI8440AB-D-IS1	SI8440AB-D-IS1	NB SOIC-16	4	0	1	2.5kV	L	-40 to +125	1.98	1.85	1.62	1.50		
634-SI8440BB-D-IS	SI8440BB-D-IS	WB SOIC-16	4	0	150	2.5kV	L	-40 to +125	3.03	2.83	2.49	2.30		
634-SI8440BB-D-IS1	SI8440BB-D-IS1	NB SOIC-16	4	0	150	2.5kV	L	-40 to +125	2.91	2.72	2.39	2.21		
634-SI8441AB-D-IS	SI8441AB-D-IS	WB SOIC-16	3	1	1	2.5kV	L	-40 to +125	2.10	1.96	1.72	1.60		
634-SI8441AB-D-IS1	SI8441AB-D-IS1	NB SOIC-16	3	1	1	2.5kV	L	-40 to +125	1.98	1.85	1.62	1.50		
634-SI8441BB-D-IS1	SI8441BB-D-IS1	NB SOIC-16	3	1	150	2.5kV	L	-40 to +125	2.91	2.72	2.39	2.21		
634-SI8442AB-D-IS	SI8442AB-D-IS	WB SOIC-16	2	2	1	2.5kV	L	-40 to +125	2.10	1.96	1.72	1.60		
634-SI8442AB-D-IS1	SI8442AB-D-IS1	NB SOIC-16	2	2	1	2.5kV	L	-40 to +125	1.98	1.85	1.62	1.50		
634-SI8442BB-D-IS	SI8442BB-D-IS	WB SOIC-16	2	2	150	2.5kV	L	-40 to +125	3.03	2.83	2.49	2.30		
634-SI8442BB-D-IS1	SI8442BB-D-IS1	NB SOIC-16	2	2	150	2.5kV	L	-40 to +125	2.91	2.72	2.39	2.21		
634-SI8445BB-D-IS	SI8445BB-D-IS	WB SOIC-16	4	0	150	2.5kV	L	-40 to +125	3.03	2.83	2.49	2.30		
634-SI8445BB-D-IS1	SI8445BB-D-IS1	NB SOIC-16	4	0	150	2.5kV	L	-40 to +125	2.91	2.72	2.39	2.21		
634-SI8450AB-B-IS1	SI8450AB-B-IS1	NB SOIC-16	5	0	1	2.5kV	L	-40 to +125	2.22	2.08	1.82	1.69		
634-SI8450BB-B-IS1	SI8450BB-B-IS1	NB SOIC-16	5	0	150	2.5kV	L	-40 to +125	3.26	3.04	2.67	2.48		
634-SI8451AB-B-IS1	SI8451AB-B-IS1	NB SOIC-16	4	1	1	2.5kV	L	-40 to +125	2.22	2.08	1.82	1.69		
634-SI8451BB-B-IS1	SI8451BB-B-IS1	NB SOIC-16	4	1	150	2.5kV	L	-40 to +125	3.26	3.04	2.67	2.48		
634-SI8452AB-B-IS1	SI8452AB-B-IS1	NB SOIC-16	3	2	1	2.5kV	L	-40 to +125	2.22	2.08	1.82	1.69		
634-SI8452BB-B-IS1	SI8452BB-B-IS1	NB SOIC-16	3	2	150	2.5kV	L	-40 to +125	3.26	3.04	2.67	2.48		
634-SI8460AB-B-IS1	SI8460AB-B-IS1	NB SOIC-16	6	0	1	2.5kV	L	-40 to +125	2.47	2.31	2.03	1.88		
634-SI8460BB-B-IS1	SI8460BB-B-IS1	NB SOIC-16	6	0	150	2.5kV	L	-40 to +125	3.64	3.40	2.99	2.77		
634-SI8461AB-B-IS1	SI8461AB-B-IS1	NB SOIC-16	5	1	1	2.5kV	L	-40 to +125	2.47	2.31	2.03	1.88		
634-SI8461BB-B-IS1	SI8461BB-B-IS1	NB SOIC-16	5	1	150	2.5kV	L	-40 to +125	3.64	3.40	2.99	2.77		
634-SI8462AB-B-IS1	SI8462AB-B-IS1	NB SOIC-16	4	2	1	2.5kV	L	-40 to +125	2.47	2.31	2.03	1.88		
634-SI8462BB-B-IS1	SI8462BB-B-IS1	NB SOIC-16	4	2	150	2.5kV	L	-40 to +125	3.64	3.40	2.99	2.77		
634-SI8463AB-B-IS1	SI8463AB-B-IS1	NB SOIC-16	3	3	1	2.5kV	L	-40 to +125	2.47	2.31	2.03	1.88		
634-SI8463BB-B-IS1	SI8463BB-B-IS1	NB SOIC-16	3	3	150	2.5kV	L	-40 to +125	3.64	3.40	2.99	2.77		
5.0kV														
634-SI8410AD-A-IS	SI8410AD-A-IS	WB SOIC-16	1	0	1	5.0kV	L	-40 to +125	1.50	1.40	1.23	1.14		
634-SI8410BD-A-IS	SI8410BD-A-IS	WB SOIC-16	1	0	150	5.0kV	L	-40 to +125	2.19	2.04	1.80	1.66		
634-SI8420AD-A-IS	SI8420AD-A-IS	WB SOIC-16	2	0	1	5.0kV	L	-40 to +125	1.54	1.44	1.26	1.17		
634-SI8420BD-A-IS	SI8420BD-A-IS	WB SOIC-16	2	0	150	5.0kV	L	-40 to +125	2.24	2.09	1.84	1.70		
634-SI8421AD-B-IS	SI8421AD-B-IS	WB SOIC-16	1	1	1	5.0kV	L	-40 to +125	1.54	1.44	1.26	1.17		
634-SI8421BD-B-IS	SI8421BD-B-IS	WB SOIC-16	1	1	150	5.0kV	L	-40 to +125	2.24	2.09	1.84	1.70		
634-SI8422AB-B-IS	SI8422AB-B-IS	NB SOIC-8	1	1	1	5.0kV	L	-40 to +125	1.17	1.09	.964	.893		
634-SI8422AD-B-IS	SI8422AD-B-IS	WB SOIC-16	1	1	1	5.0kV	L	-40 to +125	1.54	1.44	1.26	1.17		
634-SI8422BB-B-IS	SI8422BB-B-IS	NB SOIC-8	1	1	150	5.0kV	L	-40 to +125	1.70	1.59	1.39	1.29		
634-SI8422BD-B-IS	SI8422BD-B-IS	WB SOIC-16	1	1	150	5.0kV	L	-40 to +125	2.24	2.09	1.84	1.70		
634-SI8423AB-B-IS	SI8423AB-B-IS	NB SOIC-8	2	0	1	5.0kV	L	-40 to +125	1.17	1.09	.964	.893		
634-SI8423AD-B-IS	SI8423AD-B-IS	WB SOIC-16	2	0	1	5.0kV	L	-40 to +125	1.54	1.44	1.26	1.17		
634-SI8423BB-B-IS	SI8423BB-B-IS	NB SOIC-8	2	0	150	5.0kV	L	-40 to +125	1.70	1.59	1.39	1.29		
634-SI8423BD-B-IS	SI8423BD-B-IS	WB SOIC-16	2	0	150	5.0kV	L	-40 to +125	2.24	2.09	1.84	1.70		

DIGITAL ISOLATORS REFERENCE DESIGN KITS

MOUSER STOCK NO.	Silicon Labs Part No.	Description	Price Each
634-ISOVOLT35-KIT	ISOVOLT35-KIT	3V/5V ISOVOLT reference design for kit for digital isolators	39.99
634-ISOVOLT55-KIT	ISOVOLT55-KIT	3V/3V or 5V/5V ISOVOLT reference design for kit for digital isolators	39.99
634-SI84XXCOM-RD	SI84XXCOM-RD	SI84xx digital isolated communications reference design kit for SI84xx digital isolators	40.00