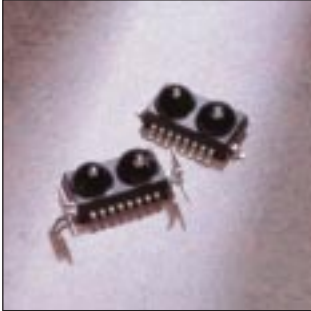


### IrDA Infrared Transceivers



Part Number	HSDL-1001	HSDL-1100	Units
Data Rate Range	9.6K – 115.2K	9.6K – 4.0M	Baud
Distance Range	0 to 1	0 to 1	m
Supply Voltage	3 to 5	5	V
Idle Current	0.18 @ 5.5 V	3 @ 5.25 V	mA
Shutdown Feature	Yes	No	—
Receiver Latency	0.1	0.2	ms
Operating Temp	0 to 70	0 to 70	C
EMI Shield	No	Available	—
IrDA Standard	SIR	FIR	—
Package Size (h x w)	8.75 x 15	8.75 x 15	mm
Package Options	Top, Mid, Front	Top, Front	
Applications	Notebook/desktop PCs, FAX modems, PDAs, handheld instruments	Notebook/desktop PCs, printers	

### IrDA Infrared Transceivers, Small-IR



Part Number	HSDL-2100	HSDL-2300	Units
Data Rate Range	9.6K – 4.0M	9.6K – 4.0M	Baud
Distance Range	0 to 1	0 to 1	m
Supply Voltage	5	2.7 to 3.6	V
Idle Current	3	2.5	mA
Shutdown Feature	No	Yes	—
Receiver Latency	0.5 ms	20 μs	—
Operating Temp	0 to 70	0 to 70	C
EMI Shield	Yes — integrated	Yes — integrated	—
IrDA Standard	FIR	FIR	—
Package Size (h x w)	5.5 x 8.8	5.5 x 8.8	mm
Applications	Notebook/desktop PCs, Data Communications, Digital Imaging, Industrial and Medical Instruments, IR LANs		

### IrDA Infrared Transceivers, Tiny-IR



Part Number	HSDL-3201	HSDL-3600	HSDL-3610	Units
Data Rate Range	9.6K – 115.2K	9.6K – 4.0M	9.6K – 115.2K	Baud
Distance Range	20 cm	0 to 1	0 to 1	m
Supply Voltage	2.7 to 3.6	2.7 to 3.6	2.7 to 5.25	V
Idle Current	2.5	2.5	2.5	mA
Shutdown Feature	Yes	Yes	Yes	—
Receiver Latency	50	20	20	μs
Operating Temp	0 to 70	-20 to +85	-20 to +85	C
EMI Shield	Yes — integrated	Yes — integrated	Yes — integrated	—
IrDA Standard	SIR low power option	FIR	SIR	—
Package Size (h x w)	2.5 x 8.0	4.0 x 12.2	4.0 x 12.2	mm
Applications	Mobile Telecom, Data Communications, Digital Imaging	Digital Imaging, Data Communications, Telecommunications, Small Industrial & Medical Instrumentation Products		

### Infrared Emitters<sup>[1]</sup>



Part Number	HSDL-4220	HSDL-4230	HSDL-4400	HSDL-4420	Units
Package Size	T-1 3/4 (5)	T-1 3/4 (5)	Subminiature (2x2)	Subminiature (2x2)	mm
Viewing Angle	30	17	110	24	degrees
On Axis Intensity	38	75	3	17	mW/sr
Forward Voltage	1.50	1.50	1.50	1.50	V
Rise/Fall Time	40	40	40	40	ns
Operating Temp	0 to 70	0 to 70	-40 to 85	-40 to 85	C
Mounting Options	top, right angle	top, right angle	SMT top and reverse, thru-hole	SMT top and reverse, thru-hole	
Applications	Extended distance to IrDA IR transceivers, consumer audio/video, automotive, industrial handhelds, diffuse IR networks, control, and sensor		Short-range IR data links, small handheld, pagers, PCMCIA cards, diagnostics/programming, board-to-board, smart cards and sensor		

Note 1: Where applicable forward current is 50 mA

### Infrared Detectors<sup>[2]</sup>



Part Number	HSDL-5400	HSDL-5420	Units
Package Size	Subminiature	Subminiature	—
Viewing Angle	110	28	degrees
Photocurrent @ 875 nm	1.6	6.0	μA
Dark Current	1.0	1.0	nA
Rise/Fall Time	7.5	7.5	ns
Operating Temp	-40 to 85	-40 to 85	C
Mounting Options	SMT top and reverse, thru-hole	SMT top and reverse, thru-hole	—
Applications	Short-range IR data links, small handheld, pagers, PCMCIA cards, diagnostics/programming, board-to-board, smart cards and sensor		

Note 2: Where applicable incidence is 1 mW/cm<sup>2</sup>

### Interface ICs



Part Number	HSDL-7000	HSDL-7001	Units
Description	IrDA 3/16th Modulation IC	IrDA 3/16th Modulation IC with 16x Clock Generator	—
Interface to	HSDL-3201, HSDL-1001, HSDL-3600	HSDL-3201, HSDL-1001, HSDL-3600	
Operating Temperature	-10 to 85	-10 to 85	C
Package	8 Pin SMT	16 Pin SMT	—

## Evaluation Kits

Part Number	<a href="#">HSDL-8000</a>	<a href="#">HSDL-8001</a>	<a href="#">HSDL-8010</a>
Description	Evaluation Kit for IrDA applications up to 115 Kb/s	Developer Kit for IrDA applications up to 115 Kb/s; More extensive version of the HSDL-8000	Evaluation Kit for IrDA applications up to 4 Mb/s
Contents	Two fully functional PCBs with HSDL-1001 and HSDL-7001; HSDL-4220 and HSDL-4230 are provided for extended distance applications; interfaces to UART or RS-232 or Super I/O chipsets that support IrDA 1.0 at 115 Kb/s	Two serial IR adapters, software, two fully functional PCBs with HSDL-1000 and HSDL-7000, HSDL-4220 and HSDL-4230 are provided for extended distance applications; interfaces to UART or RS-232 or Super I/O chipsets that support IrDA 1.0 at 115 Kb/s	Two fully functional PCBs with HSDL-1100; interfaces to Super I/O chipsets that support IrDA 1.1 at 4 Mb/s