

Miscellaneous Amplifiers - continued

Mfr. Pins	Description	Mfrs. List No.	Order Code	1+	25+	100+	250+	+
3011 CIR 8 / SOIC	Precision, Low-voltage Amplifier, DC to 1 kHz	CS3011-ISZ	102-3351	165.00	138.00	119.00	--	--
3012 CIR 8 / SOIC	Dual, Precision, Low-voltage Amplifier, DC to 1 kHz	CS3012-ISZ	102-3352	270.00	225.00	172.00	--	--
3310 CIR 16 / SOIC	Stereo Digital Volume Control	CS3310-KSZ	102-3353	431.00	360.00	315.00	--	--
4102 MAX 8 / SOIC	250MHz, Broadcast Quality, Video Amp	MAX4102ESA+	118-8063	190.00	159.00	131.00	--	--
4106 MAX 8 / SOIC	350MHz, Ultra-Low-Noise Amp. for Pulse/RF applications	MAX4106ESA+	972-6446	268.00	205.00	157.00	--	--
6001 NSC 8 / DIL	Electrometer Amp.	LMC6001CIN	949-4030	184.00	136.00	108.00	--	--
8037 ADI 8 / DIL	Low Distortion, 240MHz bandwidth Clamping Amp.	AD8037ANZ	107-9416	348.00	298.00	248.00	--	--
8318 ADI 16 / LFCSP	1MHz to 8GHz Logarithmic Detector/Controller	AD8318ACPZ-R2	107-8291	470.00	391.00	313.00	--	--
8318 ADI 16 / LFCSP	1MHz to 8GHz Logarithmic Detector/Controller	AD8318ACPZ-WP	107-8292	470.00	391.00	313.00	--	--
9001 TI 6 / SOP	AMP, 50-350MHz CASCADEABLE	THS9001DBVT	845-3578	133.00	102.00	78.00	68.00	--

Power Amplifiers

Bipolar and MOSFET Power Amplifiers



The HY series of Power Amplifier Modules are a versatile range of building blocks for constructing high quality audio amplifiers with a minimum of additional components. The HY200x range includes the latest technology incorporating anti-thump circuitry and modules with on-board PSU components.

These modular hybrid amplifiers have been designed using Bipolar or MOSFET (HY2006/7) technology to provide high fidelity performance. Encapsulation to an integral heatsink together with internal circuitry providing output stage protection make them extremely rugged, both electrically and mechanically, and therefore suitable for all audio applications. For loudspeaker protection the use of a quickblow fuse is recommended - please refer to the data sheet.

The modules only require a minimum of external connection, and should be mounted to allow a vertical flow of air through the heatsink fins. T slots in the heatsink facilitate mounting using the nuts and screws provided.

	HY2000	HY2001	HY2002	HY2003	HY2004	HY2005	HY2006	HY2007
Output Power into 4 ohms (rms)	40W	40W	75W	75W	150W	150W	240W	240W
Output Power into 8 ohms (rms)	40W	40W	75W	75W	150W	150W	240W	240W
Power supply voltage	±30Vd.c.	20V - 0 - 20Vd.c.	±40Vd.c.	28V - 0 - 28Vd.c.	±55Vd.c.	40V - 0 - 40Vd.c.	±60Vd.c.	±60Vd.c.
Loudspeaker fuse (Quick Blow) 4Ω	2A	2A	2.5A	2.5A	3.15A	3.15A	5A	5A
Loudspeaker fuse (Quick Blow) 8Ω	1.5A	1.5A	2A	2A	2.5A	2.5A	—	—
Module dimensions H x W (mm)	30 x 76	30 x 76	30 x 120	30 x 120	80 x 120	80 x 120	80 x 190	80 x 190
Frequency response	15Hz - 50kHz	15Hz - 50kHz	15Hz x 50kHz	15Hz - 50kHz	15Hz - 50kHz	15Hz - 50kHz	15Hz - 50kHz	15Hz - 70kHz
Total harmonic distortion @ 1kHz	>0.005%	>0.005%	>0.005%	>0.005%	>0.005%	>0.005%	>0.005%	>0.005%
Signal to noise ratio (DIN Audio)	100dB	100dB	100dB	100dB	100dB	100dB	100dB	100dB
Input impedance, Ω	100kR	100kR	100kR	100kR	100kR	100kR	100kR	100kR
Load impedance, Ω	4/8R	4/8R	4/8R	4/8R	4/8R	4/8R	4R	4R
Damping factor (8Ω @ 100Hz)	<400	<400	<400	<400	<400	<400	<400	<400

*Max. DC rails (8Ω load)

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The HY2000/1/2/3/4/5 series are switchable for 4 or 8 Ohm operation, the power supply requirements will change depending on this setting. The modules HY2001, 2003, 2005, 2007 feature on-board rectifier and smoothing capacitors and therefore only require an AC source from a suitable transformer. The modules HY2000/2002/2004/2006 require smoothing capacitors, rectifier and transformer.

Mfrs. List No.	Order Code	1+	5+	10+
HY2000	121-1574	1,409.00	1,217.00	1,053.00
HY2001	121-1577	1,760.00	1,521.00	1,317.00
HY2002	121-1578	1,760.00	1,521.00	1,339.00
HY2003	121-1579	2,565.00	2,235.00	1,937.00
HY2004	121-1580	4,103.00	3,576.00	3,099.00
HY2005	121-1581	5,129.00	4,469.00	3,874.00
HY2006	121-1582	7,179.00	6,257.00	5,423.00
HY2007	121-1583	8,889.00	7,747.00	6,714.00

Analogue Multiplexers

211041

Mfr. Pins Pkg	Description	rDS (on) Ω max.	Mfrs. List No.	Order Code	1+	25+	100+	250+	+
1-Channel									
634 TI 16 SOIC	Multiplexer	-	MPY634KUE4	120-6922	1,110.00	964.00	879.00	824.00	--
2034 SLX 12 QFN	1.8V to 5.5V Single 4:1 Analogue Multiplexer	-	DG2034DN-T1-E3	110-2496	122.00	98.00	86.00	81.00	--
2-Channel									
8170 ADI 8 DIL	250MHz, 10nS Switching Multiplexer with Output Amp	-	AD8170ANZ	107-9331	185.00	158.00	132.00	--	--
8183 ADI 24 TSSOP	380 MHz, 25 mA, Triple 2:1 Multiplexer (G = +1) (IND TEMP)	-	AD8183ARUZ	942-6051	226.00	207.00	182.00	--	--
8185 ADI 24 TSSOP	380 MHz, 25 mA, Triple 2:1 Multiplexer (G = +2) (IND TEMP)	-	AD8185ARUZ	942-6060	226.00	194.00	162.00	--	--
9415 SLX 10 TSSOP	2.7V to 12V Dual 2 x 1 CMOS Analogue Multiplexer	-	DG9415DQ-T1-E3	110-2512	152.00	122.00	107.00	100.00	--
4-Channel									
3 INTS 16 DIL	4-Channel Double Pole CMOS Analogue Multiplexer	400	HI3-0509-5	402-370	247.00	230.00	213.00	196.00	--
3 INTS 16 DIL	4-Channel Double Pole CMOS Analogue Multiplexer	400	HI3-0509-5Z	121-6112	247.00	230.00	213.00	196.00	--
24 ADI 16 DIL	4-Channel Double Pole JFET Analogue Multiplexer, over voltage and power supply loss protected.	400	MUX24FPZ	107-9378	436.00	363.00	291.00	--	--
350 MAX 20 SSOP	Dual 4-channel, separately controlled single-pole single throw multiplexer.	100	MAX350EAP+	118-7969	611.00	468.00	314.00	--	--
409 INTS 16 DIL	4-Channel Double Pole CMOS Analogue Multiplexer	100	DG409DJZ	966-4084	85.00	79.00	73.00	68.00	--
409 INTS 16 SOIC	4-Channel Double Pole CMOS Analogue Multiplexer	100	DG409DYZ	966-3835	71.00	66.00	62.00	57.00	--
409 SLX 16 SOIC	4-Channel Double Pole CMOS Analogue Multiplexer	100	DG409DY-E3	107-7098	150.00	120.00	105.00	99.00	--
409 SLX 16 SOIC	4-Channel Double Pole CMOS Analogue Multiplexer	100	DG409DY-E3	107-7098	150.00	120.00	105.00	99.00	--
409 SLX 16 SOIC	4-Channel Double Pole CMOS Analogue Multiplexer	40	DG409LDY	396-5569	134.00	107.00	94.00	88.00	--
409 SLX 16 SOIC	4-Channel Double Pole CMOS Analogue Multiplexer	40	DG409LDY-E3	107-7100	134.00	107.00	94.00	88.00	--
509 ADI 16 DIL	4-Channel Double Pole CMOS Analogue Multiplexer	450	ADG509AKNZ	960-4944	206.00	187.00	166.00	--	--
509 BB 28 DIL	4-Channel Double Pole CMOS Analogue Multiplexer. Over-voltage protected and ESD resistant	1500	MPC509AP	632-892	300.00	231.00	203.00	192.00	--
509 TI 16 SOIC	Multiplexer, 4-Channel	1500	MPC509AUG4	120-6921	332.00	254.00	210.00	188.00	--
509 TI 28 DIL	4-Channel Double Pole CMOS Analogue Multiplexer. Over-voltage protected and ESD resistant	1500	MPC509AP	121-4449	300.00	229.00	190.00	169.00	--
704 ADI 10 MSOP	4-Channel Single Pole CMOS Analogue Multiplexer	35	ADG704BRMZ	942-5756	86.00	76.00	64.00	--	--
709 ADI 16 TSSOP	Dual, CMOS, 3-Ohm Low Voltage, 4-Channel Multiplexer (IND TEMP)	5	ADG709BRUZ	960-4359	120.00	106.00	93.00	--	--
729 ADI 16 TSSOP	Dual, CMOS, Low-Voltage, 2-Wire Serially-Controlled, 4 way Matrix Switch (IND TEMP)	2.5	ADG729BRUZ	107-9348	151.00	126.00	100.00	--	--
739 ADI 16 TSSOP	Dual, CMOS, Low-Voltage, 3-Wire Serially-Controlled, 4 way Matrix Switch (IND TEMP)	2.5	ADG739BRUZ	114-3201	154.00	128.00	102.00	--	--
774 ADI 16 SOIC	4-Channel Double Pole CMOS Analogue Multiplexer	8	ADG774BRZ	942-5799	146.00	122.00	97.00	--	--
804 ADI 10 MSOP	1.65V to 3.6V 4-Channel CMOS Multiplexer	0.5	ADG804YRMZ	107-8225	111.00	75.00	71.00	--	--
4524 MAX 10 TSSOP	4-Channel Single Pole CMOS Analogue Multiplexer. (TSSOP)	200	MAX4524CUB+	118-7936	200.00	154.00	104.00	--	--
8174 ADI 14 DIL	250MHz, 10nS Switching Multiplexer with Output Amp	-	AD8174ANZ	114-3195	312.00	261.00	208.00	--	--
8174 ADI 14 DIL	250MHz, 10nS Switching Multiplexer with Output Amp	-	AD817ANZ	960-4006	146.00	122.00	97.00	--	--
9409 SLX 16 QFN	±3V to ±6V Precision Dual 4-Channel Analogue Multiplexer	3.9	DG9409DN-T1-E3	110-2510	240.00	192.00	168.00	158.00	--