

TYPE ULN-2274B, ULN-2274P, ULN-2275P, ULN-2278B, and ULN-2278P DUAL AUDIO AMPLIFIERS★

These dual audio amplifiers are linear monolithic integrated circuits designed primarily for low-cost audio amplifiers in phonograph and radio applications. They are also ideally suited for industrial applications requiring high power output and reliable performance.

- Low Distortion
- Low Quiescent Current
- Self Centering Bias
- High Input Impedance
- High Open Loop Gain
- High Peak Output Current
- High Channel Separation
- Internal Compensation Network
- Minimum External Components
- Operating Temperature Range: -40°C to $+85^{\circ}\text{C}$
- Plastic Package
14-pin Dual In-Line B
8-pin + 2-tabs Dual In-Line P

Type Number	Power Rating per Channel (Watts) RMS	V_{CC} (Volts)		R_L (ohms)	Thermal Shut-down
		Nom.	Max.		
ULN-2274	1	9	20	8-16	Yes [Ⓢ]
ULN-2275	1	9	20	8-16	No
ULN-2278	2	9	22	8-16	Yes [Ⓢ]

[Ⓢ] Also has a-c short-circuit protection

★ Package P (8-pin + 2-tabs) available until present stocks are exhausted.

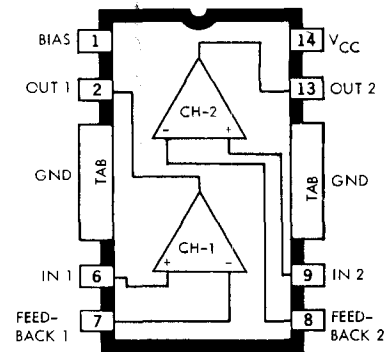


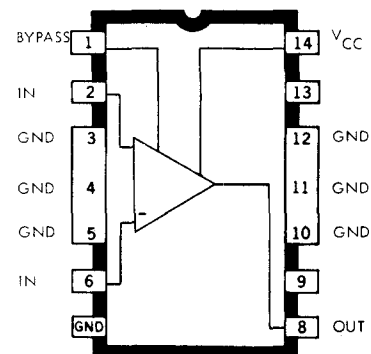
FIG. No. A-9093A

TYPE ULN-2280B and ULN-2281B AUDIO POWER AMPLIFIERS

These monolithic integrated circuits are designed for minimum external component requirements. They are ideally suited for applications in consumer, automotive, and communications designs. The ULN-2280B is rated for 2 watts max. applications; the ULN-2281B for 4 watt max. applications.

FEATURES

- Low Distortion
- Low Quiescent Current
- 34 dB Internally Fixed Gain
- High Input Impedance
- Thermal Overload Protection
- Output Short Circuit Current Limiting
- Minimum External Components
- Supply Voltage Range: ULN-2280B, 8-26V; ULN-2281B, 9-32V



- Operating Temperature Range: -40°C to $+85^{\circ}\text{C}$
- ULN-2280B is replacement for LM380N, ULN-2281B for LM384N
- Webbed Plastic Package (14-pin) Dual In-Line B

SPRAGUE

INTEGRATED CIRCUIT CROSS REFERENCE GUIDE O.E.M. TO SPRAGUE

Original Source CROSS-REFERENCE to SPRAGUE Integrated Circuits

To Replace	Use Sprague Type	To Replace	Use Sprague Type	To Replace	Use Sprague Type	To Replace	Use Sprague Type
NATIONAL SEMI. MICRO. DIV.		NUCLEONIC PRODUCTS CO. INC.		SGS-ATES		TEXAS INSTRUMENTS Cont.	
CA 3045	ULN2045H	NC7401N	US8881A	TDA 1200	ULN2289A	SN55462JP	UDS3612H
CA 3046	ULN2046A	SFC2046E	ULN2046A	L141T1	ULN2151D	SN55463JP	UDS3613H
CA 3054	ULN2054A	SFC2054EC	ULN2054A	T7401B1	US8881A	SN55464JP	UDS3614H
CA 3086	ULN2086A	N V PHILIPS		SIEMENS		SN55471JP	UDS3611H
DM7401N	US8881A	TBA221		ULN2151D	SN55472JP	UDS3612H	
DM7427N	US7427A	TBA221B	ULN2151M	SIGNETICS CORP.		SN55473JP	UDS3613H
DM7432N	US7432A	PLESSEY SEMICONDUCTORS		N5065A	ULN2165A	SN55474JP	UDS3614H
DM7437N	US7437A	SL3045	ULN2046A	N5070B	ULN2124A	SN75451BP	UDN3611M
DM7438N	US7438A	SL3046	ULN2046A	N5071A	ULN2127A	SN75452BP	UDN3612M
DS3611N	UDN3611M	SL3086	ULN2086A	N5072A	ULN2114A	SN75453BP	UDN3613M
DS3612N	UDN3612M	SL3145	ULN2045H	N5111A	ULN2111A	SN75454BP	UDN3614M
DS3613N	UDN3613M	PRECISION MONOLYTHICS INC.		N7401A	US8881A	SN75461P	UDN3611M
DS3614N	UDN3614M	DVR-01	UHP480	N7437A	US7437A	SN75462P	UDN3612M
DS7889N*	UHP482	SSS741BJ	ULN2151D	N7438A	US7438A	SN75463P	UDN3613M
DS8885N*	UHP481	RAYTHEON COMPANY		N8881A	US8881A	SN75464P	UDN3614M
DS8889N*	UHP482	RC741T	ULN2151D	NE546A	ULN2137A	SN75471P	UDN3611M
LM377	ULN2278P	RCA CORP. SOLID STATE DIV.		PA239	ULN2126A	SN75472P	UDN3612M
LM380	ULN2280B	CA 758E	ULN2244A	UA741CT	ULN2151D	SN75473P	UDN3613M
LM384	ULN2281B	CA 1310E	ULN2110A	UA741CV	ULN2151M	SN75474P	UDN3614M
LM741CH	ULN2151D	CA 1398E	ULN2298A	SILICON GENERAL INC.		SN76104N	ULN2120A
LM741CN	ULN2151M	CA 2111AE	ULN2111A	SG 741CM	ULN2151M	SN76105N	ULN2122A
LM746N	ULN2114A	CA 3014	ULN2113A	SG 741SCM	ULN2151M	SN76111N	ULN2121A
LM1304N	ULN2120A	CA 3045	ULN2045H	SG 741SCT	ULN2151D	SN76113N	ULN2128A
LM1304N-01	ULN2120N	CA 3046	ULN2046A	SG 3081N	ULN2081A	SN76115N	ULN2110A
LM1305N	ULN2122A	CA 3047	ULN2047	SG 3082N	ULN2082A	SN76116N	ULN2244A
LM1305N-01	ULN2122N	CA 3054	ULN2054A	SG 3086	ULN2086A	SN76130N	ULN2126A
LM1307N	ULN2128A	CA 3065	ULN2165A	SG 3217J	ULN2151D	SN76177ND	ULN2278P
LM1307N-01	ULN2128N	CA 3067	ULN2267A	SG 3821J	ULN2045H	SN76226	ULN2216
LM1310N	ULN2110A	CA 3070	ULN2124A	SG 3821N	ULN2046A	SN76227	ULN2217
LM1800	ULN2244A	CA 3071	ULN2127A	SG 3822N	ULN2054A	SN76228	ULN2218
LM1820N	ULN2137A	CA 3072	ULN2114A	SG 3822N	ULN2054A	SN76242N	ULN2124A
LM1841N	ULN2136A	CA 3075	ULN2129A	SG 3886N	ULN2086A	SN76243AN	ULN2127A
LM2111N	ULN2111A	CA 3081	ULN2081A	SOLITRON DEVICES INC.		SN76246N	ULN2114A
LM2111N-01	ULN2111N	CA 3082	ULN2082A	UC4741C	ULN2151D	SN76246N	ULN2228A
LM2113N	ULN2113A	CA 3083	ULN2083	UC4741CE	ULN2151M	SN76267N	ULN2267A
LM2113N-01	ULN2113N	CA 3086	ULN2086A	STEWART-WARNER MICROCIRCUITS INC.		SN76298N	ULN2298A
LM3045H	ULN2045H	CA 3089	ULN2289A	SW7401N	US8881A	SN76564N	ULN2264A
LM3046N	ULN2046A	CA 3120E	ULN2125A	SW7437N	US7437A	SN76635N	ULN2137A
LM3054N	ULN2054A	CA 3121	ULN2269A	SW7438N	US7438A	SN76642N	ULN2113A
LM3064N	ULN2264A	CA 3123E	ULN2137A	SW7438N	US7438A	SN76643N	ULN2111A
LM3065N	ULN2165A	R T C		TEXAS INSTRUMENTS		SN76665N	ULN2165A
LM3065N-01	ULN2165N	TBA221B	ULN2151M	SN 7427N	US7427A	SN76669N	ULN2136A
LM3067N	ULN2267A	TBA221N	ULN2151D	SN 7437N	US7437A	SN76675N	ULN2129A
LM3070N	ULN2124A	SESCOSEM		SN 7438N	US7438A	SN76678P	ULN2209M
LM3071N	ULN2127A	TBA331	ULN2046	SN 72741L	ULN2151D	SN76688ND	ULN2211P
LM3075N	ULN2129A	TBA341	ULN2054	SN72741P	ULN2151M	SN76689N	ULN2289A
LM3075N-01	ULN2129N	THOMSON CSF		SN55451B JP	UDS3611H	THOMSON CSF	
LM3086N	ULN2086A	SFC2741C		SN55452B JP	UDS3612H	SFC2741DC	ULN2151D
LM3611N	UDN3611M	SFC2741DC		SN55453B JP	UDS3613H	ULN2151M	
LM3612N	UDN3612M	TRANSISTRON ELECTRONICS CORP.		SN55454B JP	UDS3614H	ULN2151M	
LM3613N	UDN3613M	T2741WV		SN55461JP	UDS3611H	ULN2151D	
LM3614N	UDN3614M						
MC1304P	ULN2120A						
MC1305P	ULN2122A						
MC1307P	ULN2128A						
MC1310P	ULN2210A						

*Indicates the Sprague suggested replacement is similar but not an exact pin-for-pin electrical replacement.

Although care has been taken in the preparation of this guide to insure its technical correctness, no responsibility is assumed by the Sprague World Trade Corp. for any consequences of the use of items listed.

Warranty is limited to replacement of defective parts only.

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