



## LA2284/A

## LINEAR INTEGRATED CIRCUIT

### 5-DOT DUAL LED LEVEL METER DRIVER

#### DESCRIPTION

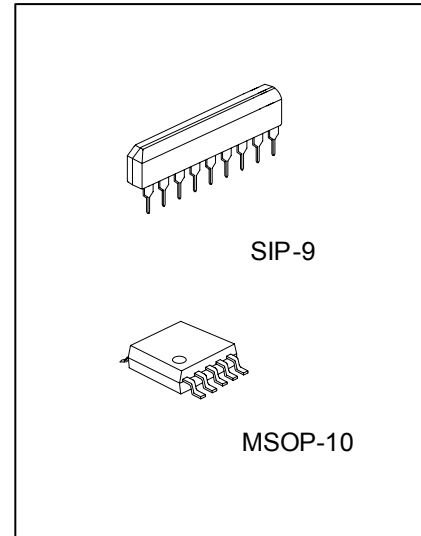
The UTC LA2284/A is a monolithic integrated circuit designed for 5-dot LED level meter drivers with a built-in rectifying amplifier. It is suitable for AC/DC level meters such as VU meters or signal meters.

#### FEATURES

- \*High gain rectifying amplifier included (Gv=26dB)
- \*Low radiation noise when LED turns on
- \*Logarithmic indicator for 5-dot LED of bar type
- \*Constant current output(15mA)
- \*Wide operating supply voltage
- \*Not necessary diode or transistor for ALC
- \*Minimum number of external parts required

#### ORDERING INFORMATION

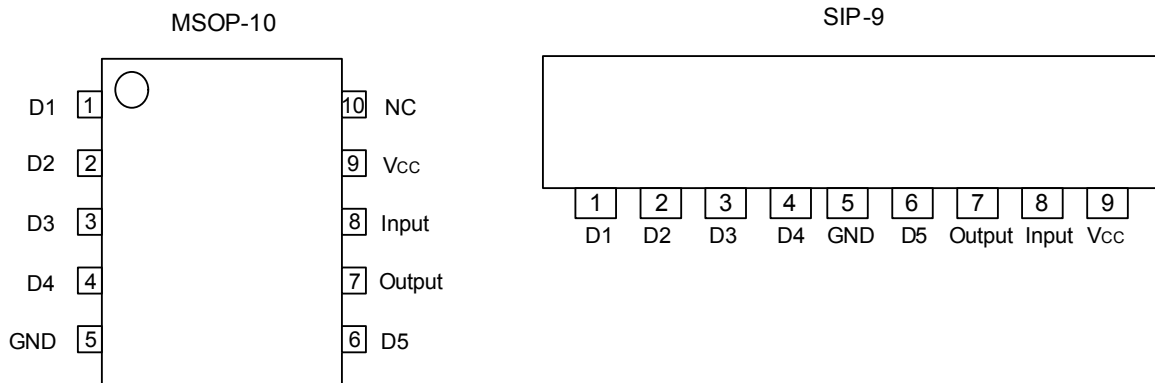
Order Number		Package	Packing
Normal	Lead Free Plating		
LA2284-G09-T	LA2284L-G09-T	SIP-9	Tube
LA2284-SM1-R	LA2284L-SM1-R	MSOP-10	Tape Reel
LA2284A-G09-T	LA2284AL-G09-T	SIP-9	Tube
LA2284A-SM1-R	LA2284AL-SM1-R	MSOP-10	Tape Reel



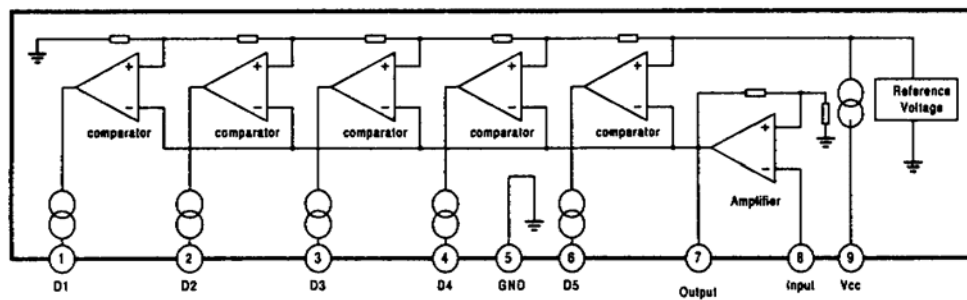
\*Pb-free plating product number:  
LA2284L/LA2284AL

<p>LA2284L-G09-T</p> <p>(1)Packing Type (2)Package Type (3)Lead Plating</p>	<p>(1) R: Tape Reel, T: Tube (2) G09: SIP-9, SM1: MSOP-10 (3) Lead Free Plating, Blank: Pb/Sn</p>
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## ■ PIN CONFIGURATION



## ■ BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V <sub>CC</sub>	18	V
Amplifier input Voltage	V <sub>8</sub>	-0.5 ~ V <sub>CC</sub>	V
Pin 7 Voltage	V <sub>7</sub>	6	V
D terminal Output Voltage	V <sub>D</sub>	18	V
Power dissipation	P <sub>D</sub>	1100	W
Operating Temperature	T <sub>OPR</sub>	-20 ~ +80	°C
Storage Temperature	T <sub>STG</sub>	-40 ~ +125	°C

Notes: Absolute maximum ratings are those values beyond which the device could be permanently damaged.  
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (Ta=25°C, V<sub>CC</sub>=6V, f=1kHz, unless otherwise specified)

PARAMETER		SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Supply Voltage	LA2284	V <sub>CC</sub>		3.5	6.0	16.0	V
	LA2284A			3.0	6.0	16.0	V
Supply Current		I <sub>CC</sub>	V <sub>IN</sub> =0		5	8	mA
Sensitivity		V <sub>IN</sub>	In Vc3 Level	46	56	66	mV
Comparator ON Level 1		Vc1		-11.5	-10.0	-8.5	dB
Comparator ON Level 2		Vc2		-6	-5	-4	dB
Comparator ON Level 3		Vc3			0		dB
Comparator ON Level 4		Vc4		2.5	3.0	3.5	dB
Comparator ON Level 5		Vc5		5	6	7	dB
LED Output Current		I <sub>O(LED)</sub>		11.0	15.0	18.5	mA
Amp Gain		G <sub>v</sub>	V <sub>IN</sub> =0.1V	24	26	28	dB
Input Bias Current		I <sub>I(BIAS)</sub>		-1.0	-0.3		μA

■ TEST CIRCUIT

