



# UNISONIC TECHNOLOGIES CO., LTD

## A6966

### LINEAR INTEGRATED CIRCUIT

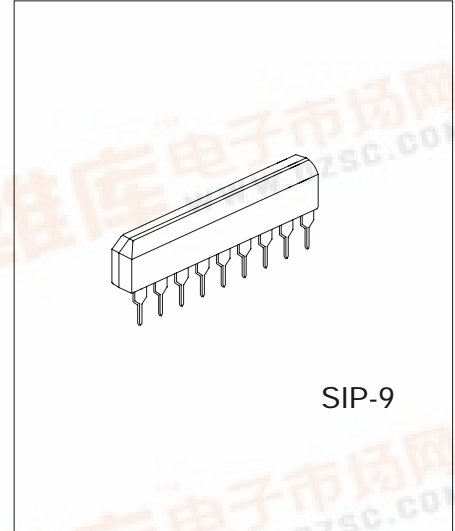
## 5 DOT LED LEVEL METER

### DESCRIPTION

The UTC **A6966** is designed for 5 LED level meter driver in 9 lead SIP package. It consists of one input amplifier and five comparators for LED level indication.

### FEATURES

- \* Low Spurious Noise Operation.
- \* Constant Current Output:  $I_{OUT}=8mA$  (Typ.)
- \* Indication Level Steps: 5dB, 5dB, 3dB, 3dB
- \* Wide Operating Supply Voltage Range:  $V_{CC} = 4 \sim 12V$
- \* Variable Input Amplifier Gain:  $G_V = 0 \sim 20dB$



SIP-9

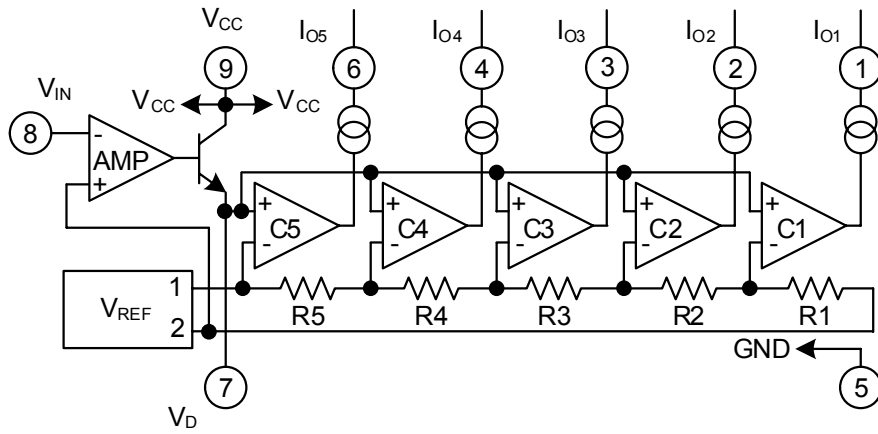
\*Pb-free plating product number: A6966L

### ORDERING INFORMATION

Order Number		Package	Packing
Normal	Lead Free Plating		
A6966-G09-T	A6966L-G09-T	SIP-9	Tube

<p>A6966L-G09-T</p> <p>(1)Packing Type (2)Package Type (3)Lead Plating</p>	<p>(1) T: Tube (2) G09: SIP-9 (3) L: Lead Free Plating, Blank: Pb/Sn</p>
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■ BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RATINGS (Ta = 25 )

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V <sub>CC</sub>	14	V
LED Driving Terminal Voltage	V <sub>L</sub>	15	V
Power Dissipation Derated above Ta = 25	P <sub>D</sub>	600 4	mW mW/
Operating Temperature	T <sub>OPR</sub>	-20 ~ +85	
Storage Temperature	T <sub>STG</sub>	-40 ~ +150	

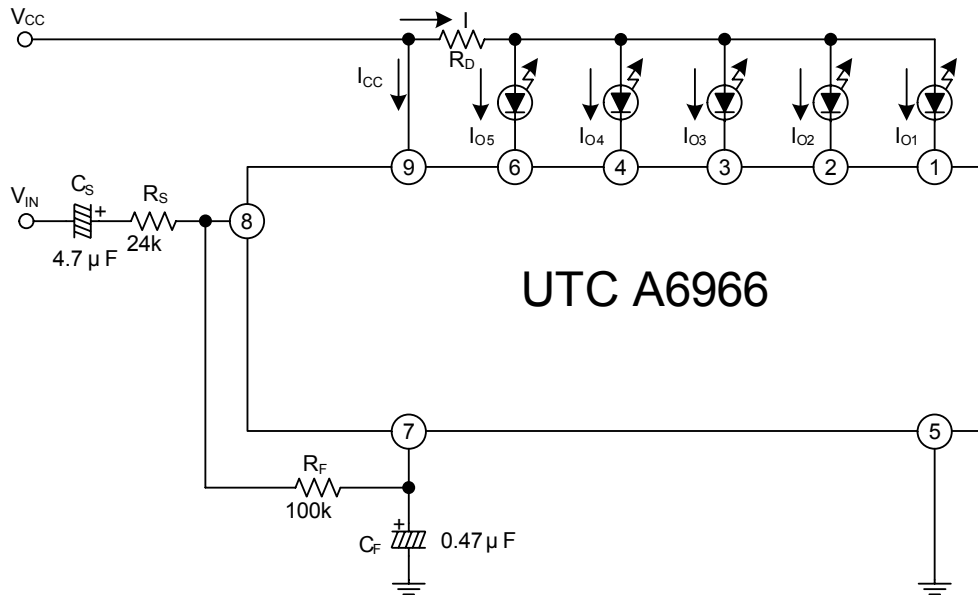
Note 1. Absolute maximum ratings are stress ratings only and functional device operation is not implied. The device could be damaged beyond Absolute maximum ratings.

2. The device is guaranteed to meet performance specifications within 0 ~+70 operating temperature range and assured by design from -20 ~+85 .

■ ELECTRICAL CHARACTERISTICS (Ta = 25 , V<sub>CC</sub>= 9V, f = 1kHz, unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Quiescent Current	I <sub>Q</sub>	V <sub>IN</sub> = 0V		3	5	mA
Output Current	I <sub>OUT</sub>		5	8	10	mA
Output Leak Current	I <sub>OUT(OFF)</sub>				50	μA
Sensitivity	V <sub>LD5(ON)</sub>	R <sub>S</sub> = 24kΩ, R <sub>F</sub> = 100kΩ		230		mV <sub>RMS</sub>
LED Turn-on Input Level	D5	R <sub>S</sub> = 24kΩ, R <sub>F</sub> = 100kΩ I <sub>OUT</sub> = 1mA	-1	0	1	dB
	D4		-4	-3	-2	
	D3		-7.5	-6	-4.5	
	D2		-13	-11	-9	
	D1		-19	-16	-13	

■ TYPICAL APPLICATION CIRCUIT



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