# UTC UNISONIC TECHNOLOGIES CO., LTD

# A6966

### LINEAR INTEGRATED CIRCUIT

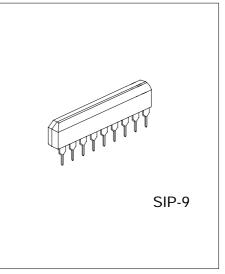
# 5 DOT LED LEVEL METER

#### **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**

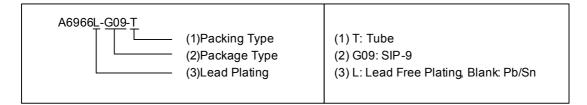
- \* Low Spurious Noise Operation.
- \* Constant Current Output: I<sub>OUT</sub>=8mA (Typ.)
- \* Indication Level Steps: 5dB, 5dB, 3dB, 3dB
- \* Wide Operating Supply Voltage Range: V<sub>CC</sub> = 4~ 12V
- \* Variable Input Amplifier Gain: G<sub>V</sub> = 0 ~ 20dB



\*Pb-free plating product number: A6966L

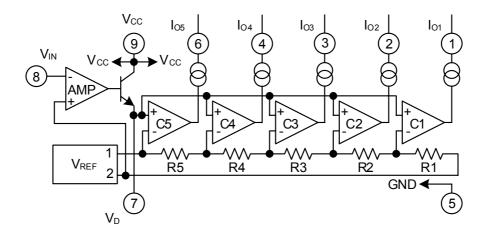
#### ORDERING INFORMATION

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



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# ■ BLOCK DIAGRAM



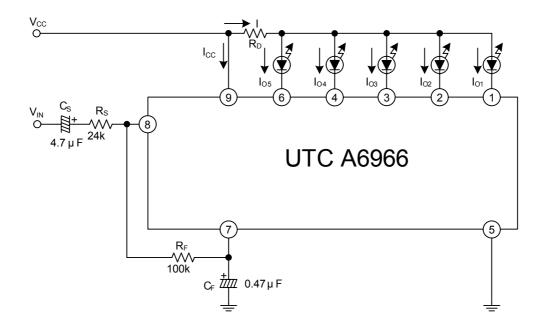
## ■ ABSOLUTE MAXIMUM RATINGS (Ta = 25 )

PARAMETER		RATINGS	UNIT
Supply Voltage	Vcc	14	V
LED Driving Terminal Voltage	$V_L$	15	V
Power Dissipation	7	600	mW
Derated above Ta = 25	P <sub>D</sub>	4	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  $\sim$ +70 operating temperature range and assured by design from -20  $\sim$ +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	ΙQ	$V_{IN} = 0V$		3	5	mA
Output Current	l <sub>out</sub>		5	8	10	mA
Output Leak Current	I <sub>OUT</sub> (OFF)				50	μΑ
Sensitivity	V <sub>LD5</sub> (ON)	$R_S = 24k\Omega$ , $R_F = 100k\Omega$		230		$mV_{RMS}$
LED Turn-on Input Level	D5	$R_S$ = 24kΩ, $R_F$ = 100kΩ $I_{OUT}$ = 1mA	-1	0	1	
	D4		-4	-3	-2	
	1 1.3		-7.5	-6	-4.5	dB
	D2		-13	-11	9	
	D1		-19	-16	-13	

#### ■ TYPICAL APPLICATION CIRCUIT



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