UTCM2110 LINEAR INTEGRATED CIRCUIT

MONAURAL MIC AMP. FOR VIDEO CAMERA

DESCRIPTION

The UTC M2110 is a monaural microphone amplifier for video camera. It can operate from 2.7V.

The performance is low operating current and small package. Therefore it is easy to design the downsizing and low consumption.

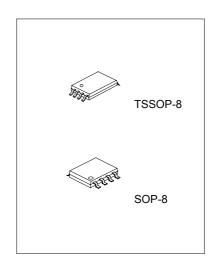
FEATURES

*Operating Voltage: 2.7V~5.3V

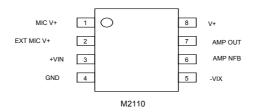
*Low Operating Current: V+=5V, 3.5mA (Typ,)

V⁺=3.3V, 1.1mA (Typ.)

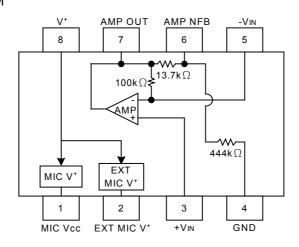
*Short Circuit Protection for External MIC.



PIN CONFIGURATION



BLOCK DIAGRAM



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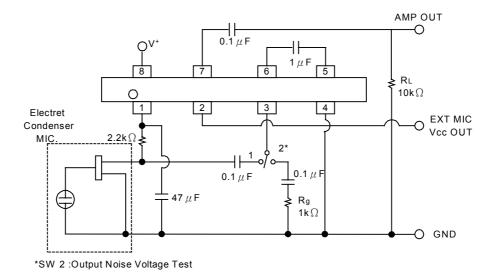
ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V ⁺	7.0	V
Power Dissipation	Po		mW
TSSOP-8		250	
SOP-8		300	
Operating Temperature Range	Toper	-20 ~+75	°C
Storage Temperature Range	Tstg	-40 ~+125	°C

ELECTRICAL CHARACTERISTICS (V*= 5V,Ta=25°C,unless otherwise specified)

ELECTIVOTE OF ITAL CONTENTS (V OV, TO 20 O, arricos otricimos opecinica)									
PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT			
Operating Current 1	Icc 1			3.5	4.5	mA			
Operating Current 2	Icc 2	V ⁺ = 3.3V		1.1	2.0	mA			
Transfer Gain	Gv	f=1KHz	27	28	29	dB			
Total Harmonic Distortion	THD	Vo=300mVrms, RL=10kΩ, f=1KHz		0. 05	0.2	%			
Maximum Output Voltage	Vom	$V^{+}= 2.7V, RL=10k\Omega, f=1kHz,THD=1%$	2.0	2.5		Vp-p			
Output Noise Voltage	Vno	Rg=1kΩ,C =0.1μF,A-Weight		30	42	μVrms			
Input Resistance Gain	Zin	f=1kHz		110		kΩ			
Output Resistance	Zo	f=1kHz		10		Ω			
MIC Output Supply Voltage 1	MICo 1		2.0	2.35	2.7	V			
MIC Output Supply Voltage 2	MICo 2	V ⁺ = 2.7V	2.0	2.25	2.5	V			
External Output Supply Voltage	EXTout	lo=25mA	4.0			V			
Output Short Circuit Current	los	EXTo=0V			30	mA			

TEST CIRCUIT



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