



## UMPI06

Preliminary

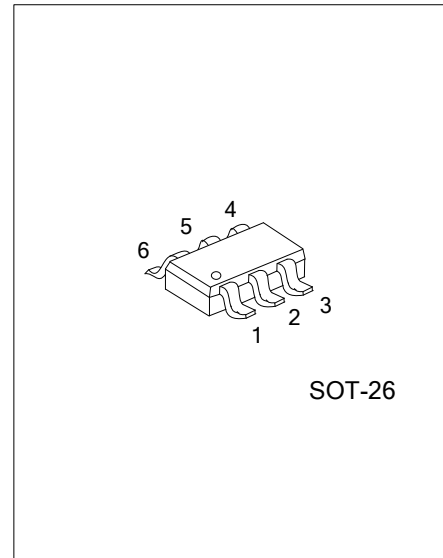
CMOS IC

### AUTO IDENTIFICATION POWER SWITCH FOR HEADPHONE SIGNAL

#### DESCRIPTION

UTC **UMPI06** is automatic identification power switch for headphone signal, used to identify different standard signals of OMTP and CTIA, and switch adaptively between the microphone signal and ground.

The UTC **UMPI06** made by CMOS technology have simply circuit structure and stable performance. Mainly used in headphones products.



SOT-26

#### FEATURES

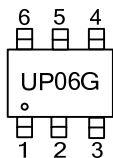
- \* Supply voltage: 0.8V~3.6V
- \* Automatic input signal identification and switching
- \* Wide range of temperature
- \* Small package and SC59-6 available

#### ORDERING INFORMATION

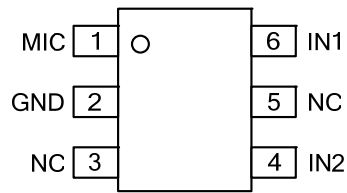
Ordering Number	Package	Packing
UMPI06G-AG6-R	SOT-26	Tape Reel

<p>UMPI06G-AG6-R</p> <p>(1) Packing Type</p> <p>(2) Package Type</p> <p>(3) Green Package</p>	<p>(1) R: Tape Reel</p> <p>(2) AG6: SOT-26</p> <p>(3) G : Halogen Free and Lead Free</p>
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#### MARKING



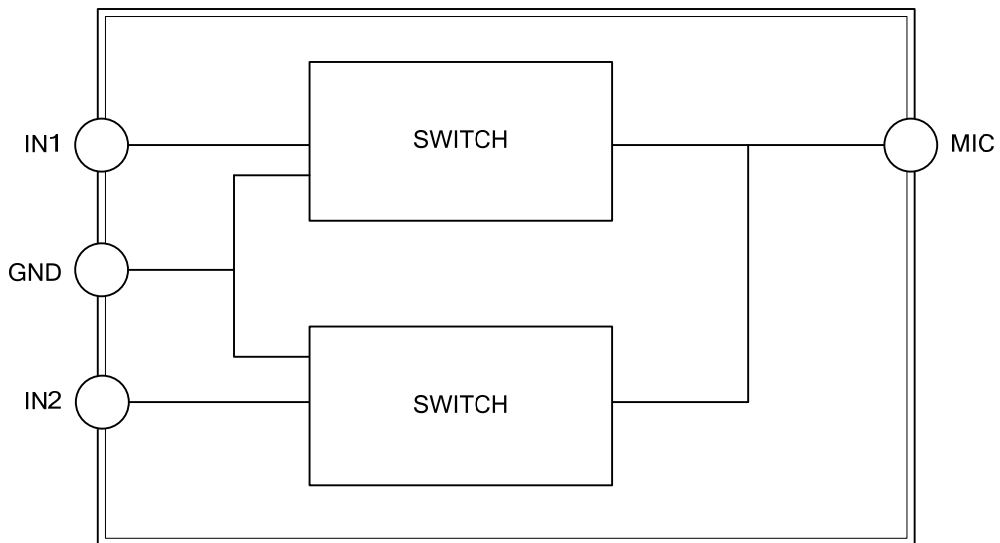
■ PIN CONFIGURATION



■ PIN DESCRIPTION

PIN NO.	PIN NAME	DESCRIPTION
1	MIC	MIC output
2	GND	Ground
3	NC	No connect
5		
4	IN2	MIC input or ground
6	IN1	MIC input or ground

■ BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RATING

PARAMETER	SYMBOL	RATINGS	UNIT
Input Voltage Range	IN1/IN2	-0.3~3.6	V
Working Temperature Range	T <sub>DD</sub>	-40~85	°C
Storage Temperature Range	T <sub>ST</sub>	-55~125	°C

Note: 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.

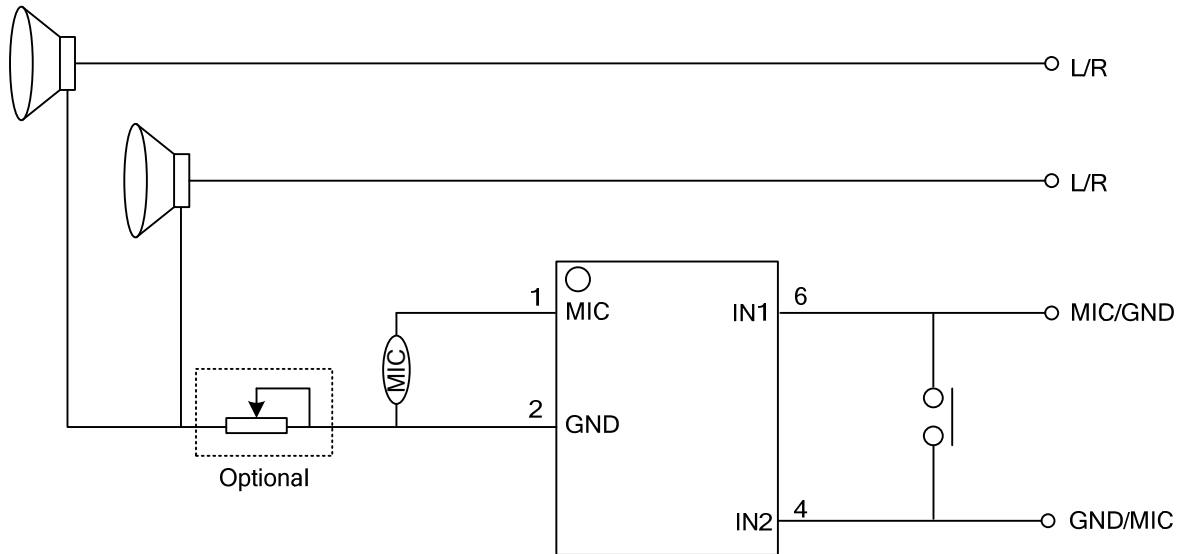
■ ELECTRICAL CHARACTERISTICS (V<sub>DD</sub>=3.0V, T<sub>A</sub>=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Input Voltage	IN1/IN2	Normal working conditions	0.8		3.6	V
Supply Current	I <sub>DD</sub>	V <sub>DD</sub> =3.0V			0.4	mA
High-Level Output Voltage	V <sub>OH</sub>	V <sub>DD</sub> =0.8V, I <sub>OH</sub> =5μA	0.7			V
		V <sub>DD</sub> =1.4V, I <sub>OH</sub> =1mA	1.3			V
		V <sub>DD</sub> =2.7V, I <sub>OH</sub> =1mA	2.6			V
		V <sub>DD</sub> =3.6V, I <sub>OH</sub> =1mA	3.5			V

■ FUNCTION DESCRIPTION

Option	Function
IN1=0 IN2=1	Conduction between IN1 and GND Conduction between IN2 and MIC
IN2=0 IN1=1	Conduction between IN2 and GND Conduction between IN1 and MIC

■ TYPICAL APPLICATION CIRCUIT



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