



UMPI06

Preliminary

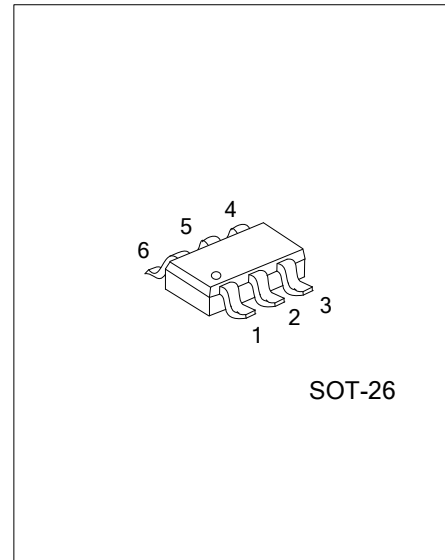
CMOS IC

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.



FEATURES

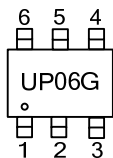
- * Supply voltage: 0.8V~3.6V
- * Automatic input signal identification and switching
- * Wide range of temperature
- * Small package and SC59-6 available

ORDERING INFORMATION

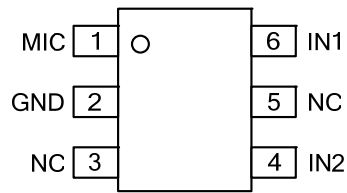
Ordering Number	Package	Packing
UMPI06G-AG6-R	SOT-26	Tape Reel

<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



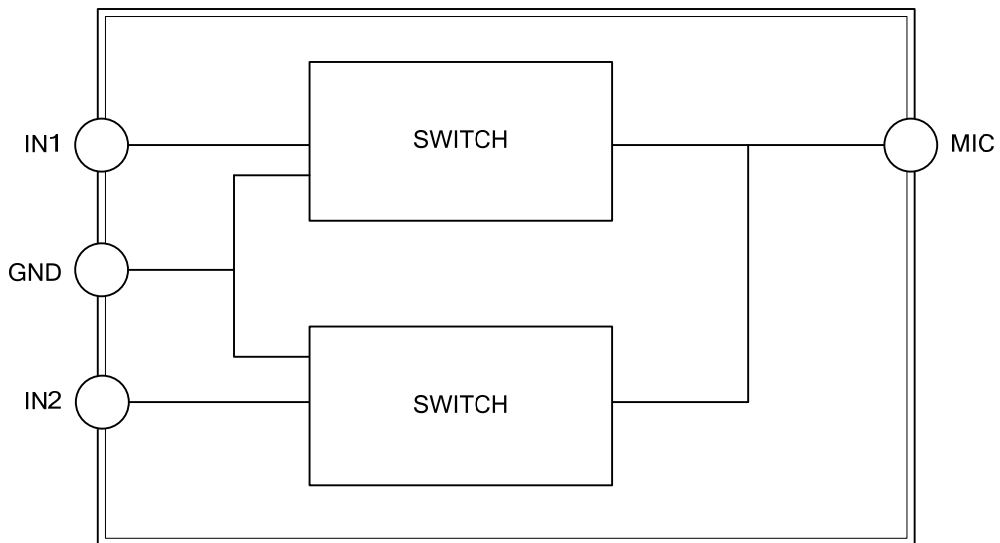
■ PIN CONFIGURATION



■ 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 _{DD}	-40~85	°C
Storage Temperature Range	T _{ST}	-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.

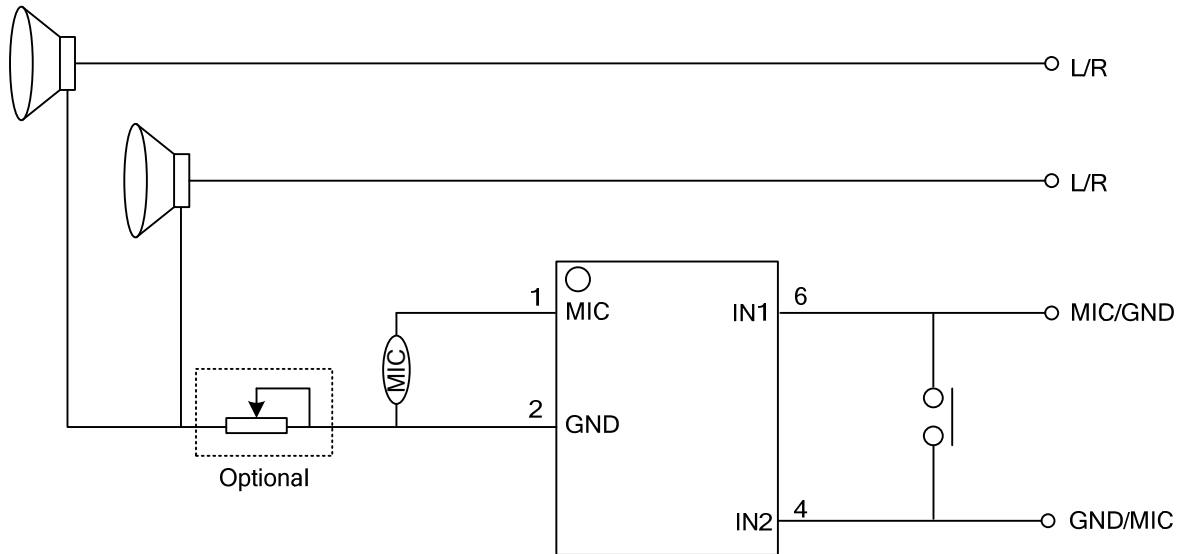
■ ELECTRICAL CHARACTERISTICS (V_{DD}=3.0V, T_A=25°C, unless otherwise specified)

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