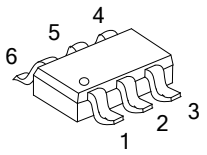
AUTO IDENTIFICATION POWER SWITCH FOR HEADPHONE SIGNAL



SOT-26

■ 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

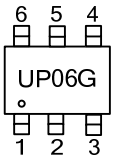
■ ORDERING INFORMATION

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

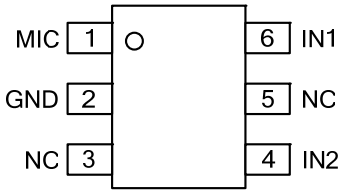
UMPI06G-AG6-R

(1) Packing Type	(1) R: Tape Reel
(2) Package Type	(2) AG6: SOT-26
(3) Green Package	(3) G : Halogen Free and Lead Free

■ MARKING



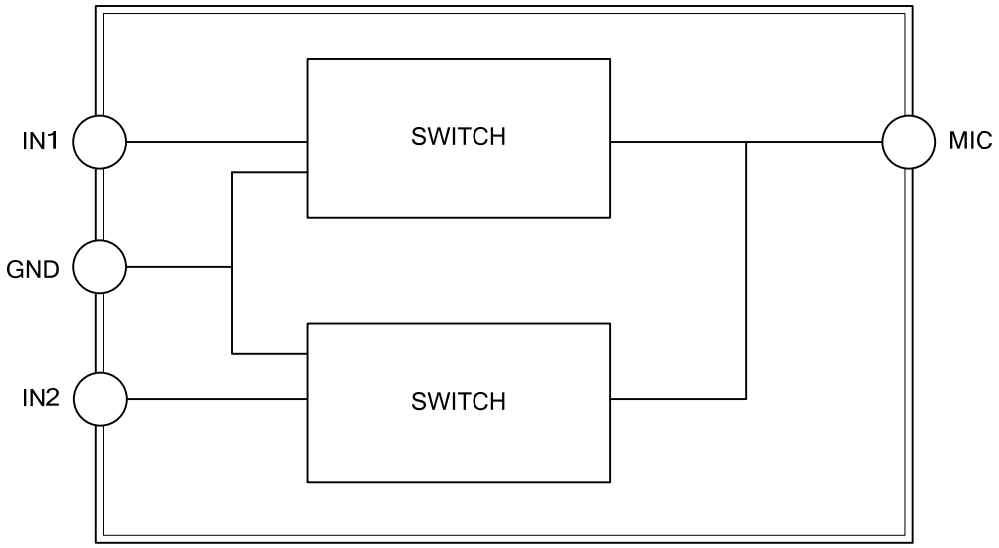
■ PIN CONFIGURATION



■ 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