

UTC UNISONIC TECHNOLOGIES CO., LTD

UMPI06

Preliminary

CMOS IC

SOT-26

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		

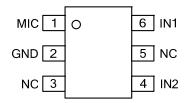
UMP106 <u>G</u> - <u>AG6-R</u>		
	(1) Packing Type	(1) R: Tape Reel
	(2) Package Type	(2) AG6: SOT-26
	(3) Green Package	(3) G : Halogen Free and Lead Free

MARKING



UMPI06

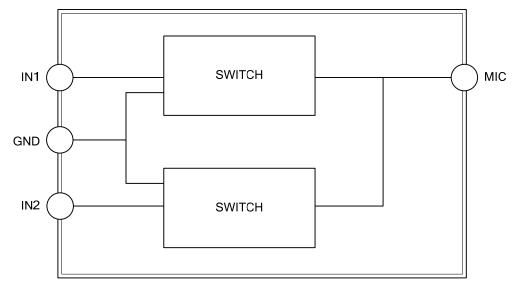
PIN CONFIGURATION



■ PIN DESCRIPTION

PIN NO.	PIN NAME	DESCRIPTION		
1	MIC	MIC output		
2	GND	Ground		
3	NC	Ne connect		
5	NC	No connect		
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} =5µА	0.7			V
	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

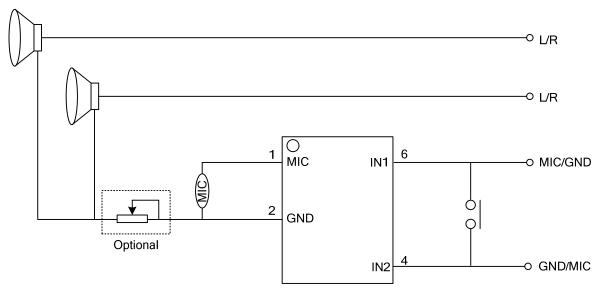


UMPI06

■ FUNCTION DESCRIPTION

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

TYPICAL APPLICATION CIRCUIT



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