

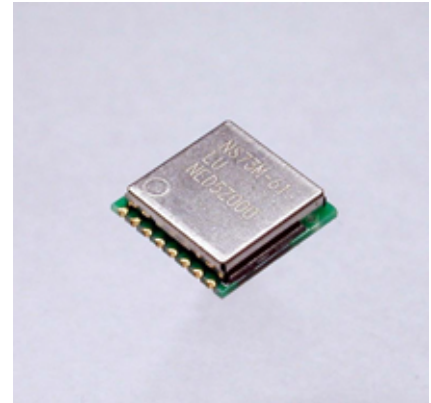
7 × 7mm Small Size FM Transmitter Module NS73M-61LU

General Description

NS73M is a FM stereo transmitter module for the applications such as wireless Microphone, MP3, CD, cellular phone.

Features

- Transmission frequency Coverage:
 - 87.5MHz to 108MHz
- Stereo multiplexing modulation
- 32.768kHz crystal oscillation support
- Small size package --- 7 x 7 x 1.5mm (typ.)
- Package type : DFN(Dual Flat No Lead Package)
- Package weight : 132mg (typ.)
- Two external components required (a capacitor and a crystal)
- Alignment-free
- 3-wire and I²C support for MPU interface
- Operating Voltage = 2.7V to 3.6V (3.0V typ.)
- Operating Temperature = -20degC to +75degC
- Full CMOS process



Operating Conditions

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
Operating Voltage	VDD	2.7	3.0	3.6	V
Operating Temperature	Ta	-20		+75	degC
Storage Temperature	Tstg	-30		+80	degC

Electrical Performance

VDD = 3.0V+/-0.05V, Ta = 25degC, f-AF = 1kHz, Vi-AF = 90mVrms, otherwise specified

PARAMETER	SYM	CONDITION	MIN	TYP	MAX	UNIT
Current Consumption	I _{dd}			36	45	mA
Standby Current	I _{stb}			1.5	20	uA
Input Low level Voltage	V _{IL}	IIC, LA, DA, CK pins	-0.3	0	0.25 * VDD	V
Input High Level Voltage	V _{IH}	IIC, LA, DA, CK pins	0.75 * VDD	VDD	VDD + 0.3	V
Output Low Level Voltage	V _{oL}	DA pin IoL = -3mA	0		0.4	V
TX Frequency	f _{TX}		87.5		108	MHz
TX Power Output	PO	RI = 50-ohm, fo = 90MHz	0.25		2	mW
Modulation Deviation	Dev	Pre-emphasis = on	+/-50			kHz
Modulation Distortion(MONO)	THD			0.4	1.0	%
Modulation SN Ratio	SNR		50	55		dB
Stereo Separation	SEP		25	35		dB
Audio Freq. Response	FR	f = 50Hz - 15kHz fi = 400Hz@0dB Vi = 12mVrms	-3	0	1.5	dB
Audio input impedance	Z _{af}	f=50Hz - 15kHz	50	60		kohm
Pilot Tone Level	PL		9	10	11	%
Crystal Frequency	f _{XT}		32.768			kHz
Crystal Tolerance	d _{XT}	Ta = 25degC VDD = 2.7V - 3.6V	-20	0	20	ppm

