Dual Low - Voltage Power Amplifier.

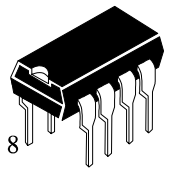
KK2822M

DESCRIPTION

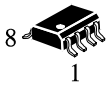
The KK2822M is a monolithic integrated circuits of analog low - voltage power amplifier. It is intended for use as mono (bridge)/stereo audio power amplifier in portable cassette players and radios.

FEATURES

- Supply voltage down to 1,8 V
- Low crossover distortion
- Low quiescent current
- Bridge or stereo configuration



N SUFFIX
PLASTIC

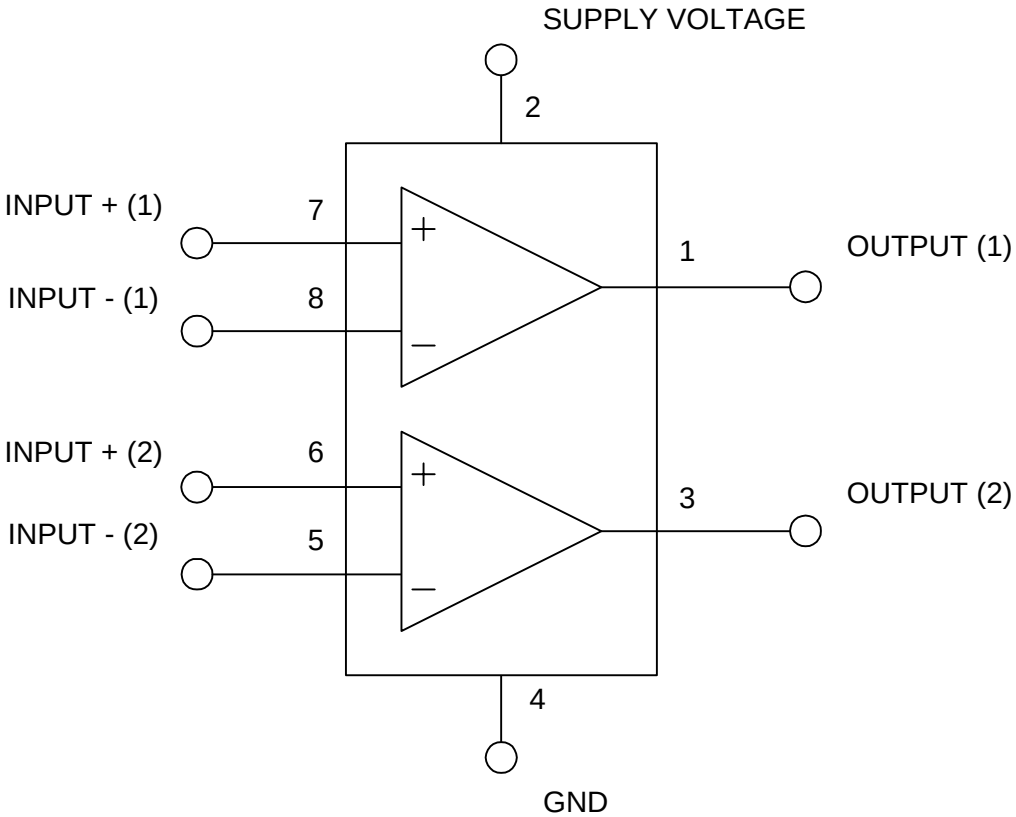


D SUFFIX
SOIC

ORDERING INFORMATION

KK2822MN Plastic
KK2822MD SOIC
T_A = -40° to 85° C for package

SCHEMATIC DIAGRAM



PIN CONFIGURATION

PIN №	I/O	NAME
1	OUTPUT	OUTPUT (1)
2		SUPPLY VOLTAGE
3	OUTPUT	OUTPUT (2)
4		GROUND
5	INPUT	INPUT - (2)
6	INPUT	INPUT + (2)
7	INPUT	INPUT - (1)
8	INPUT	INPUT + (1)

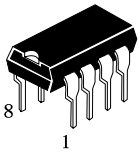
ABSOLUTE MAXIMUM RATINGS

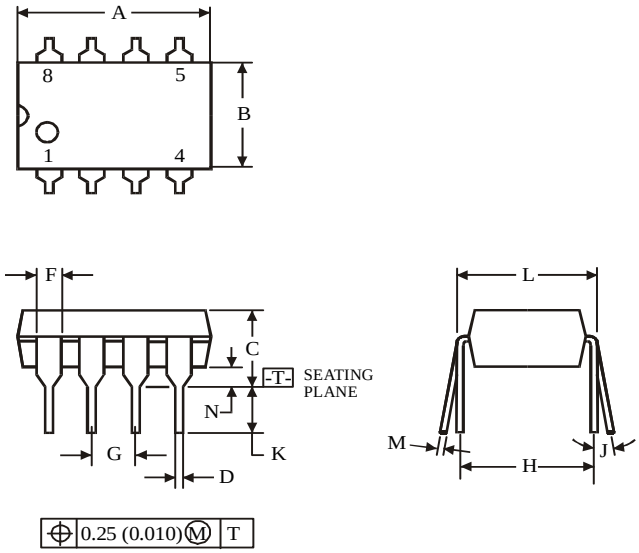
Symbol	Parameter	Value	Unit
Vs	Supply Voltage	15	V
Io	Peak Output Current	1	A
Plot	Total Power Dissipation at Tamb = 50 °C at Tease = 50 °C	1 1.4	W W
Tstg, Tj	Storage and Junction Temperature	-40,+150	°C

ELECTRICAL CHARACTERISTICS (Vs-6V, Tamb=25°C, unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
STEREO						
Vs	Supply Voltage		1.8		15	V
Vo	Quiescent Output Voltage	Vs=3V		2.7 1.2		V V
Id	Quiescent Drain Current			6	9	mA
lb	Input Bias Current			100		nA
Po	Output Power (each channel) (f=1kHz,d= 10%)	RL = 32Q Vs = 9V Vs=6V Vs = 4.5V Vs=3V Vs=2V RL^IB^ Vs=6V RL = 8^ Vs = 9V Vs=6V RL = 4Q Vs=6V Vs = 4.5V Vs=3V	90 15 170 300 450	300 120 60 20 5 220 1000 380 650 320 110		mW
d	Distortion (f = 1 kHz)	RL = 32^ Po = 40mW RL=16^ Po=75mW RL=SQ Po=150mW		0.2 0.2 0.2		% % %
Gv	Closed Loop Voltage Gain	f=1kHz	36	39	41	dB
Agv	Channel Balance				± 1	dB
Ri	Input Resistance	f-lkHz	100			k^
SN	Total Input Noise	Rs=10k^ B= Curve A B = 22Hz to 22kHz		2 2.5		uV nV
SVR	Supply Voltage Rejection	f=100Hz,C1 =C2=100uF	24	30		dB
Cs	Channel Separation	f- lkHz		50		dB
BRIDGE						
Vs	Supply Voltage		1.8		15	V
Id	Quiescent Drain Current	RL=-		6	9	mA
Vos	Output Offset Voltage (between the outputs)	RL=S^			±50	mV
lb	Input Bias Current			100		nA
Po	Output Power (f= lkHz, d= 10%)	RL = 32^ Vs = 9V Vs=6V Vs = 4.5V Vs=3V Vs=2V RL=16Q Vs=9V Vs=6V Vs=3V RL = 8fi Vs=6V Vs = 4.5V Vs=3V RL = 4fi Vs = 4.5V Vs=3V Vs=2V	320 50 900 200	1000 400 200 65 8 2000 800 120 1350 700 220 1000 350 80		mW
d	Distortion	Po = 0.5W, RL = 8Q, f = 1 kHz		0.2		%
Gv	Closed Loop Voltage Gain	f=1kHz		39		dB
Ri	Input Resistance	f=1kHz	100			k^
ON	Total Input Noise	Rs=10kQ B= Curve A B = 22Hz to 22kHz		2.5 3		uV uV
SVR	Supply Voltage Rejection	f= lOOHz		40		dB
B	Power Bandwidth (-3dB)	RL = 8Q, Po = 1W		120		kHz

N SUFFIX PLASTIC DIP
(MS – 001BA)



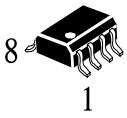


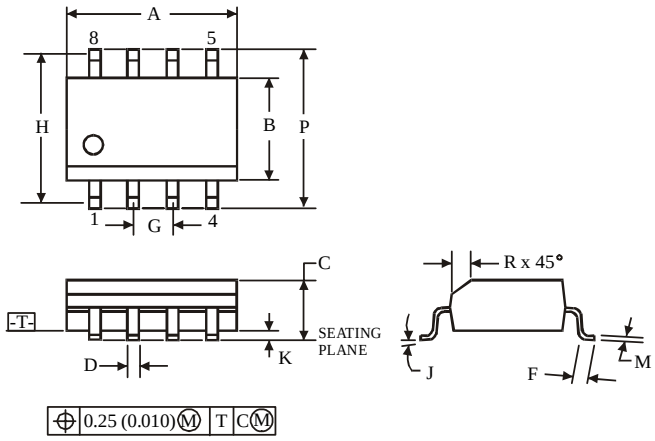
	Dimension, mm	
Symbol	**MIN**	**MAX**
A	8.51	10.16
B	6.1	7.11
C		5.33
D	0.36	0.56
F	1.14	1.78
G	2.54	
H	7.62	
J	0°	10°
K	2.92	3.81
L	7.62	8.26
M	0.2	0.36
N	0.38	

NOTES:

1. Dimensions “A”, “B” do not include mold flash or protrusions.
   Maximum mold flash or protrusions 0.25 mm (0.010) per side.

D SUFFIX SOIC
(MS - 012AA)





	Dimension, mm	
Symbol	**MIN**	**MAX**
A	4.8	5
B	3.8	4
C	1.35	1.75
D	0.33	0.51
F	0.4	1.27
G	1.27	
H	5.72	
J	0°	8°
K	0.1	0.25
M	0.19	0.25
P	5.8	6.2
R	0.25	0.5

NOTES:

1. Dimensions A and B do not include mold flash or protrusion.
2. Maximum mold flash or protrusion 0.15 mm (0.006) per side
   for A; for B – 0.25 mm (0.010) per side.