



M62438FP

SRS 3D SOUND PROCESSOR

Simplified SRS 3D Sound Processor

OUTLINE

M62438FP is an SRS 3D sound processor for PC, TV and audio equipment. This IC has only simplified SRS circuit and packed in a small 10-pin SOP.

FEATURES

- SRS 3D sound circuit
- SRS on/off function switch included

APPLICATION

- PC, TV, Mini Stereo, etc

RECOMMENDED OPERATING CONDITION

- Supply voltage range 4.5 to 12.0V
- Rated supply voltage 9V

PACKAGE OUTLINE

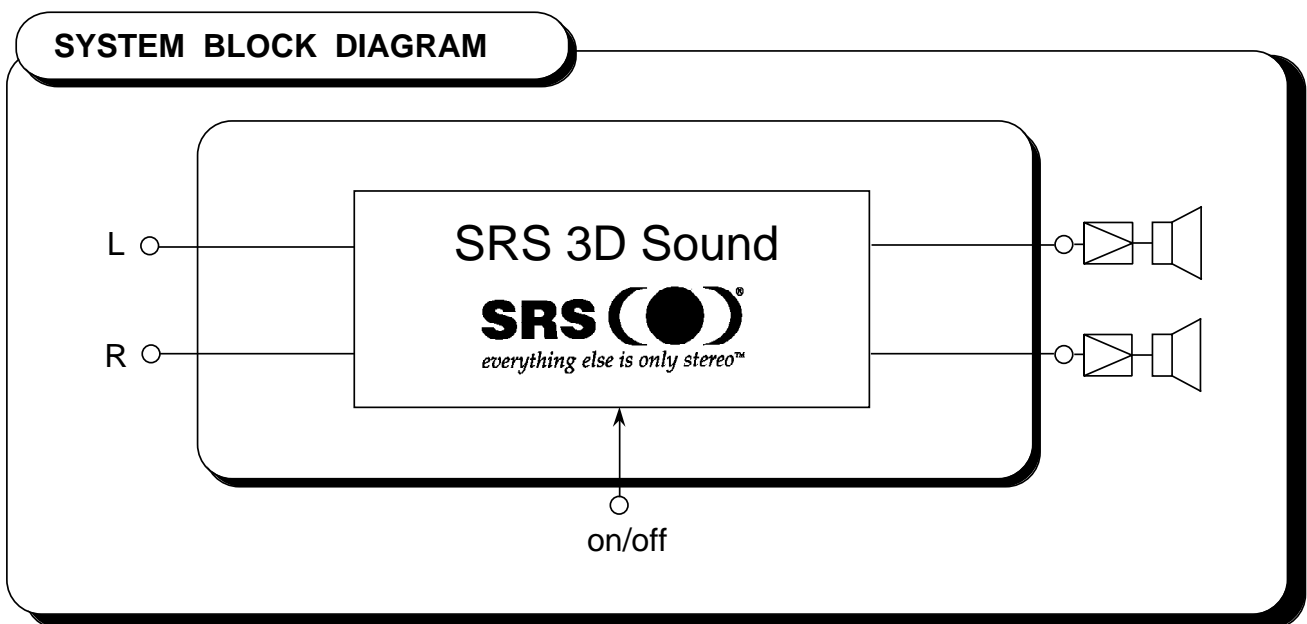


10Pin SOP

Note !!

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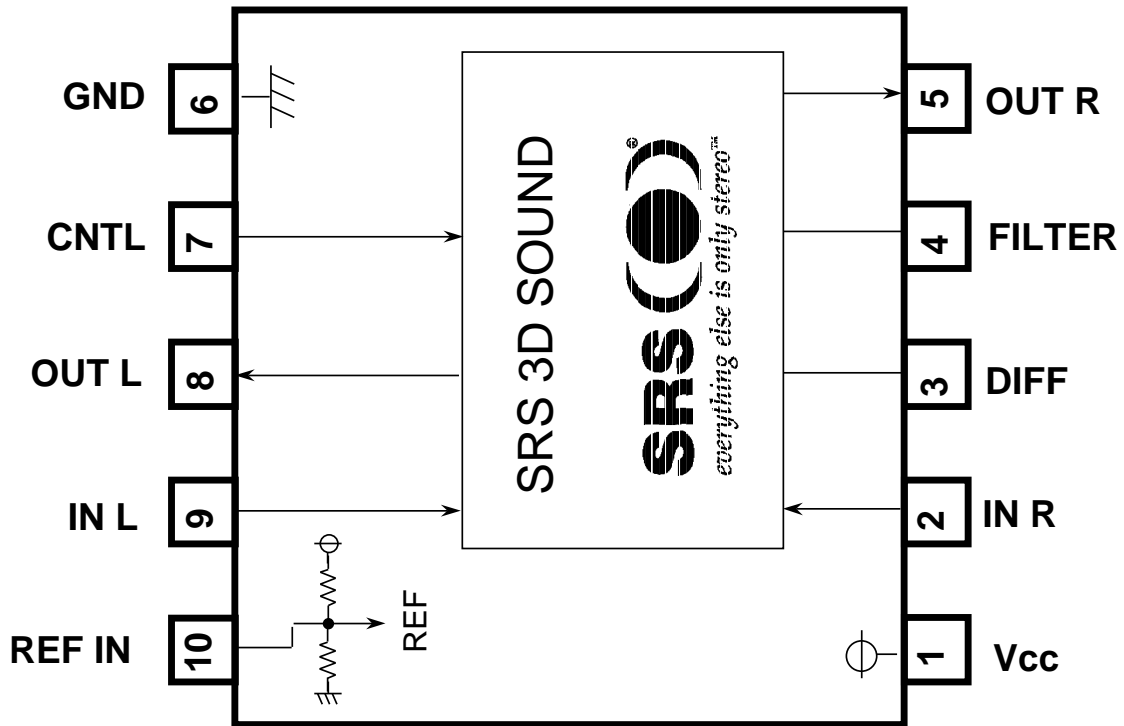
SYSTEM BLOCK DIAGRAM



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BLOCK DIAGRAM

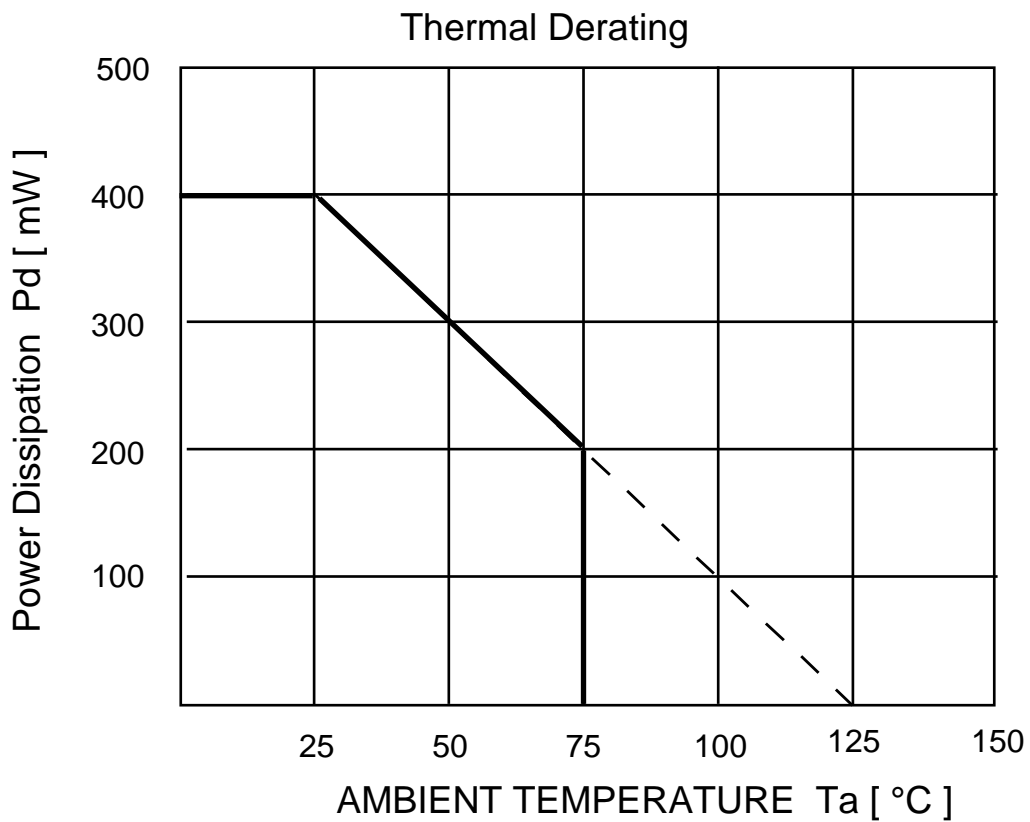


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ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Conditions	Ratings	Unit
Vcc	Supply Voltage		13.0	V
Pd	Power Dissipation	Ta<25	400	mW
K θ	Thermal Derating	Ta>25	4	mW/°C
Topr	Operating Temperature		-20 to 75	°C
Tstg	Storage Temperature		-40 to 125	°C



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RECOMMENDED OPERATING CONDITION

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
V _{CC}	Supply Voltage		4.5	9.0	12.0	V
V _{IH}	High Level Input Voltage	Pin-7 (SRS on)	2.1	—	V _{DD}	V
V _{IL}	Low Level Input Voltage	Pin-7 (SRS off)	0	—	0.8	V

ELECTRICAL CHARACTERISTICS

(1) Power Supply Characteristics

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
I _{CC}	Circuit Current		—	15	30	mA

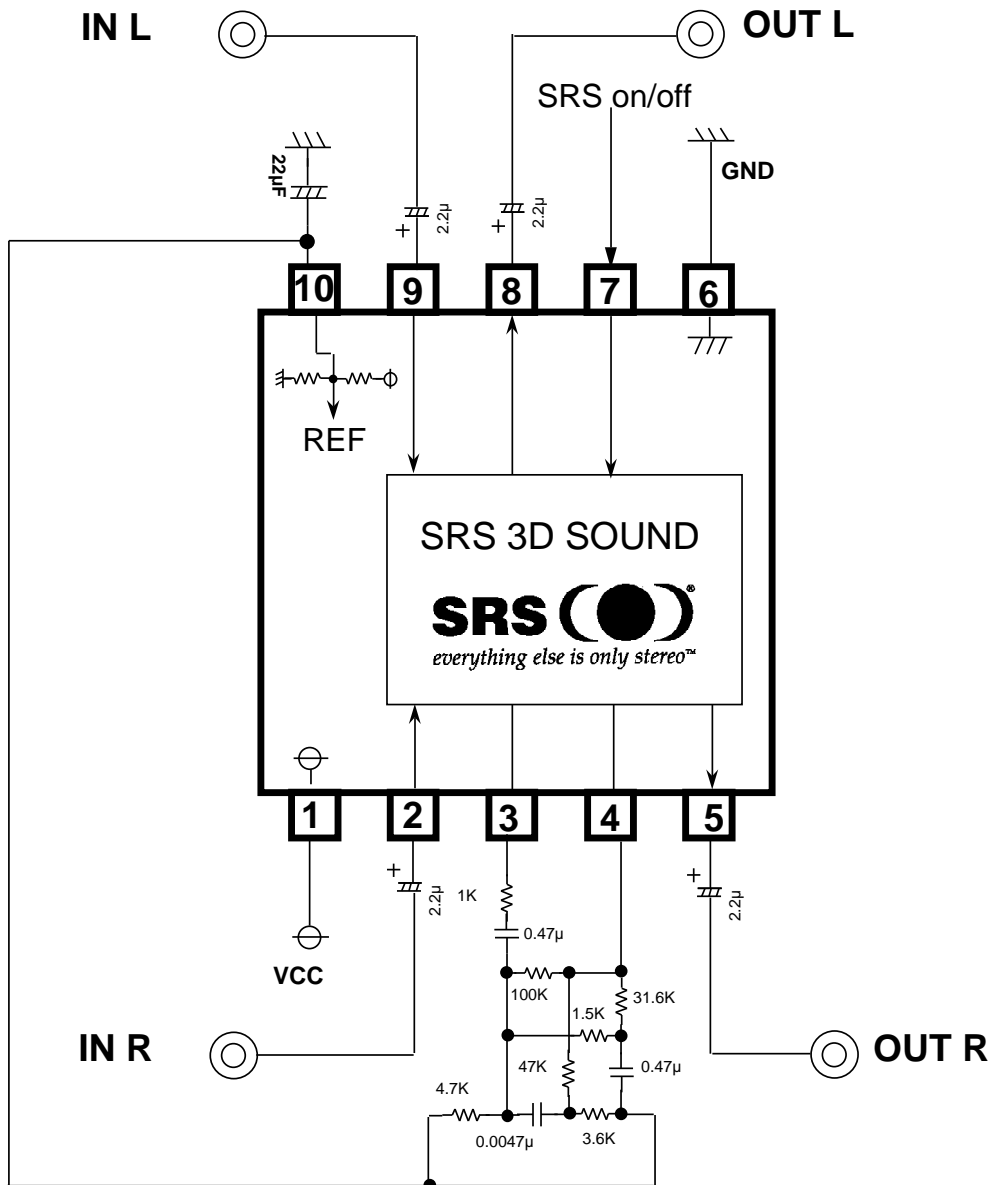
(2) -1 Input / Output Characteristics (V_{CC}=9V, T_a=25°C, V_i=500mV_{rms})

Symbol	Parameter	Conditions		Conditions	Limit			Unit
		Input	Output		Min.	Typ.	Max.	
G _{v1}	Input - Output Voltage Gain1	f=1kHz	R _L =10K	SRS off	-3	0	+3	dB
G _{v2}	Input - Output Voltage Gain2	f=1kHz	R _L =10K	SRS on	+3.5	+6.5	+9.5	dB
G _{v3}	Input - Output Voltage Gain3	f=100Hz	R _L =10K	SRS on	+9.5	+12.5	+15.5	dB
G _{v4}	Input - Output Voltage Gain4	f=10KHz	R _L =10K	SRS on	+7	+10	+13	dB
V _{OM}	Maximum Output Voltage	f=1kHz	THD=1% IHF-A filter R _L =10K	SRS on/off	1.8	2.2	—	V _{rms}
THD	Total Harmonic Distortion	f=1kHz V _i =-10dBv	DIN-A filter R _L =10K	SRS off	—	0.01	0.05	%
V _{NO1}	Output Noise Voltage1		IHF-A filter	SRS off	—	5	10	μV _{rms}
V _{NO2}	Output Noise Voltage2		IHF-A filter	SRS on	—	50	100	μV _{rms}

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APPLICATION EXAMPLE



Unit R:
C: F

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Keep safety first in your circuit designs !

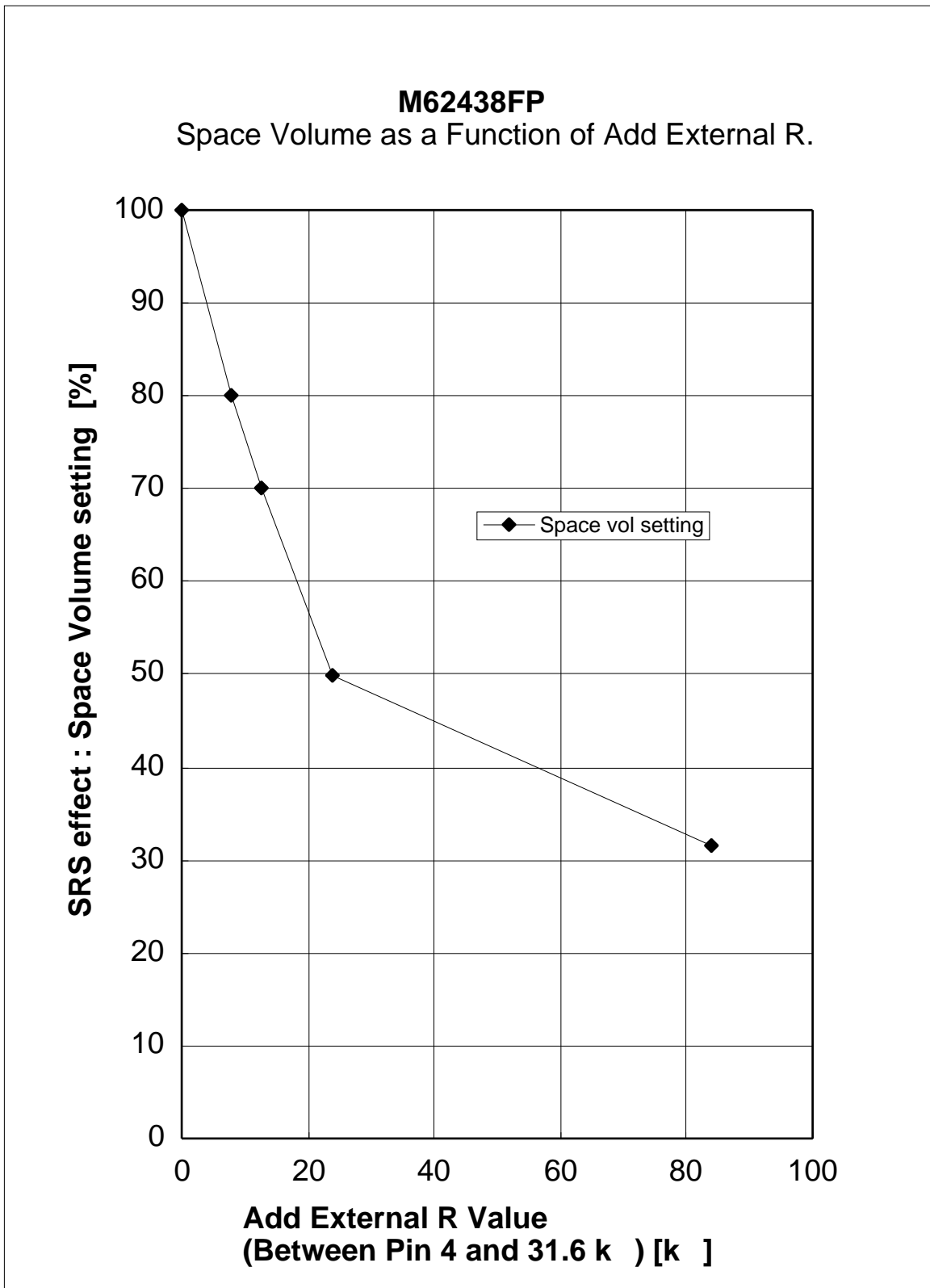
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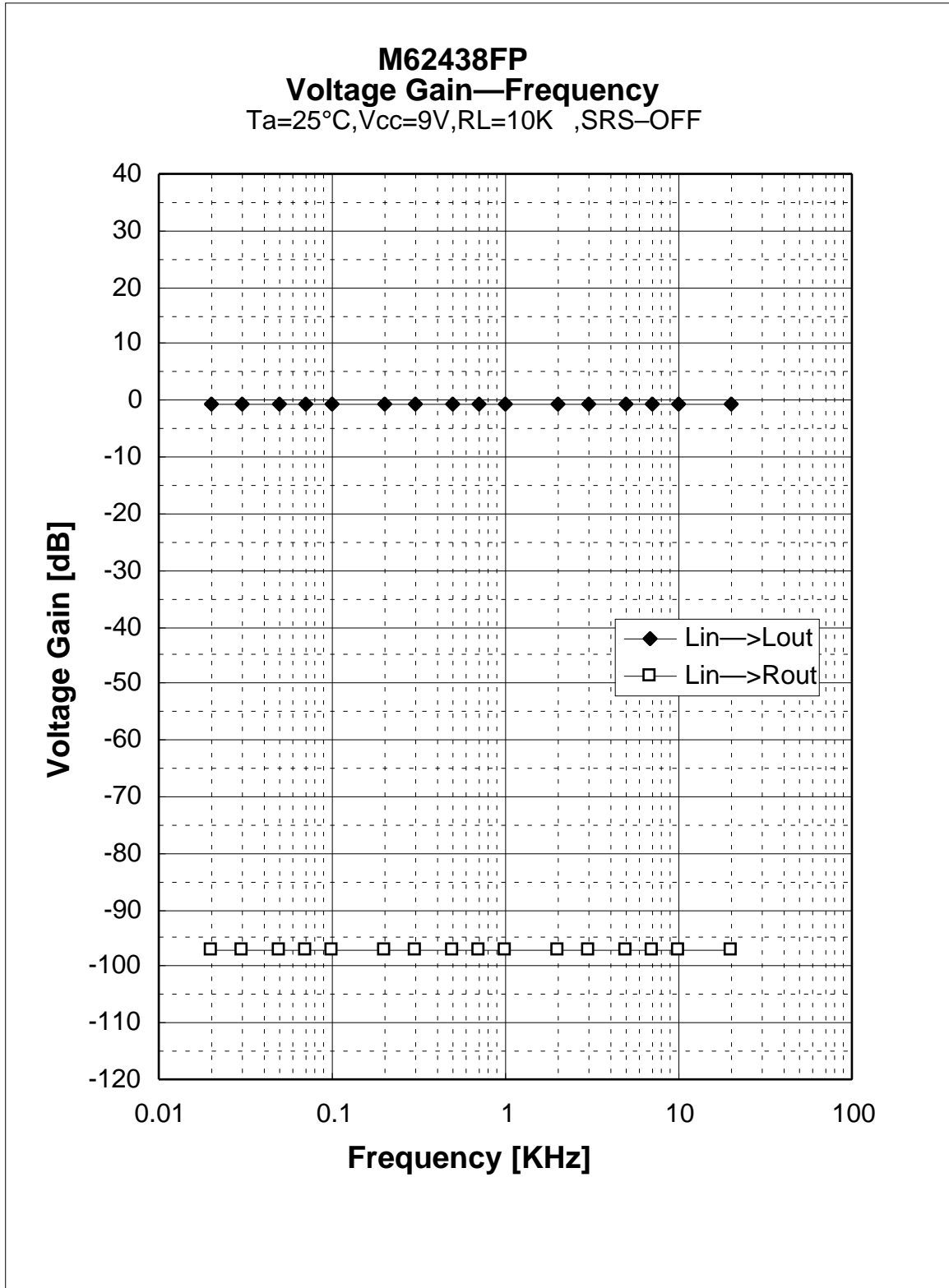
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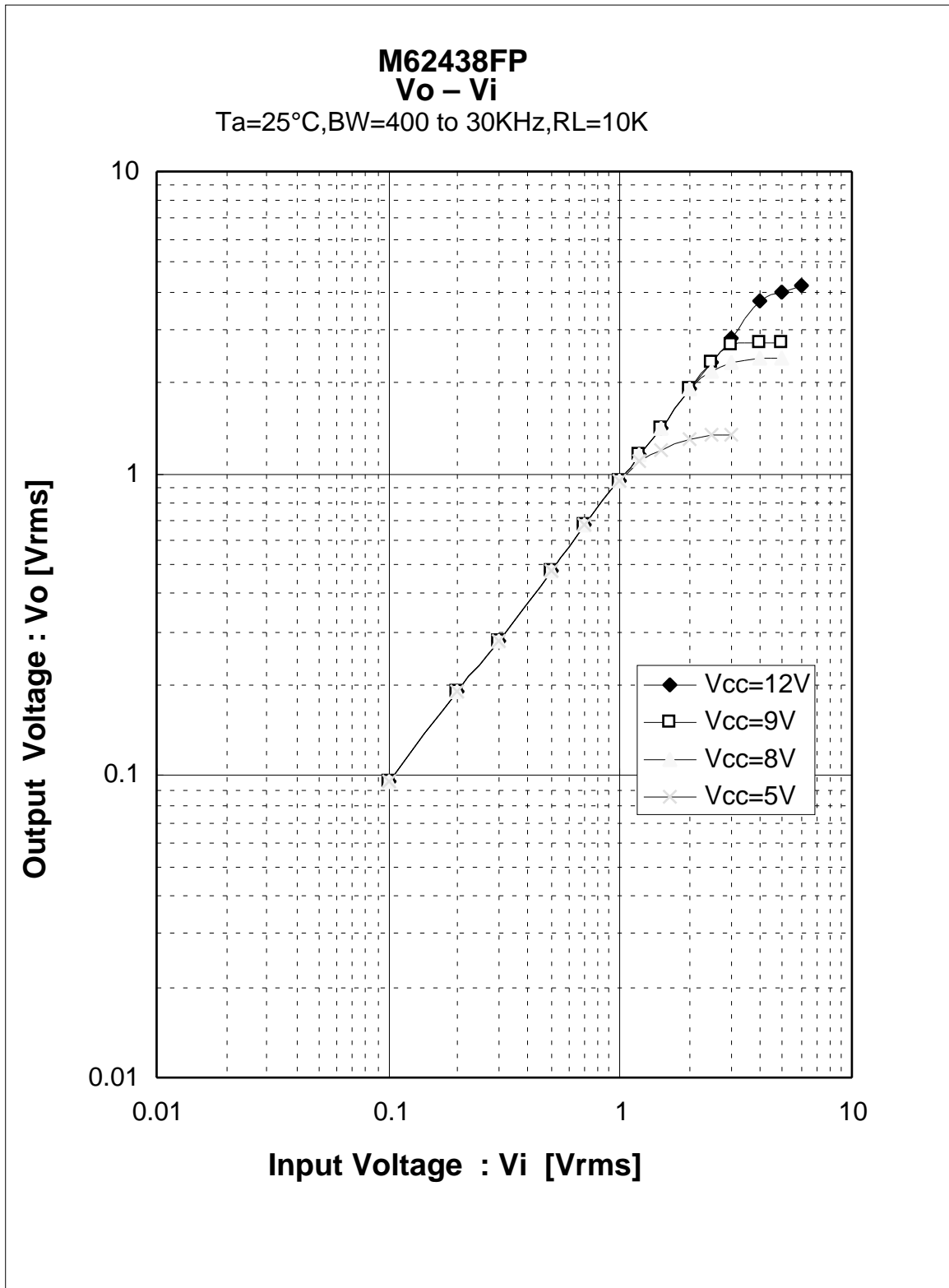
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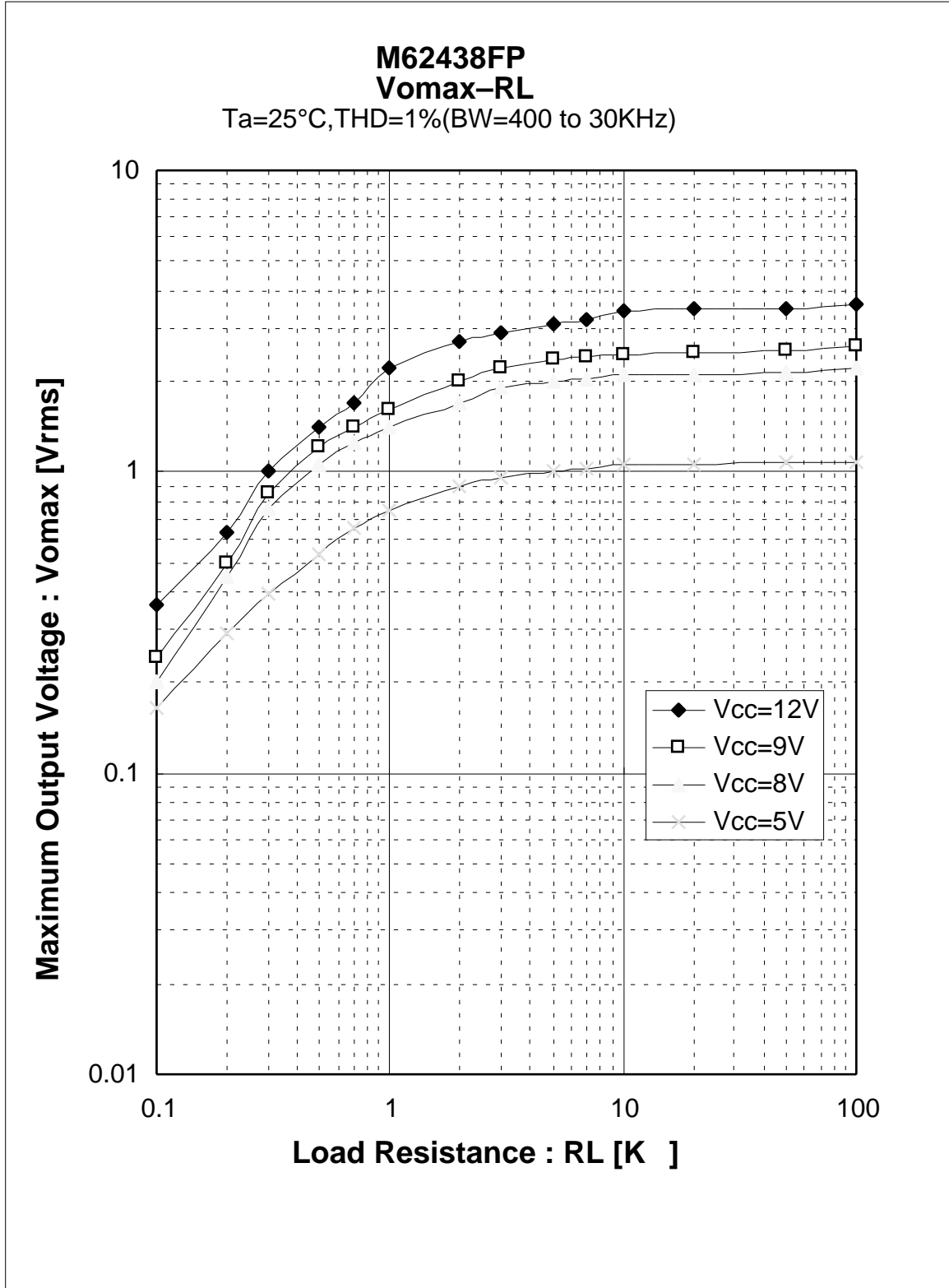
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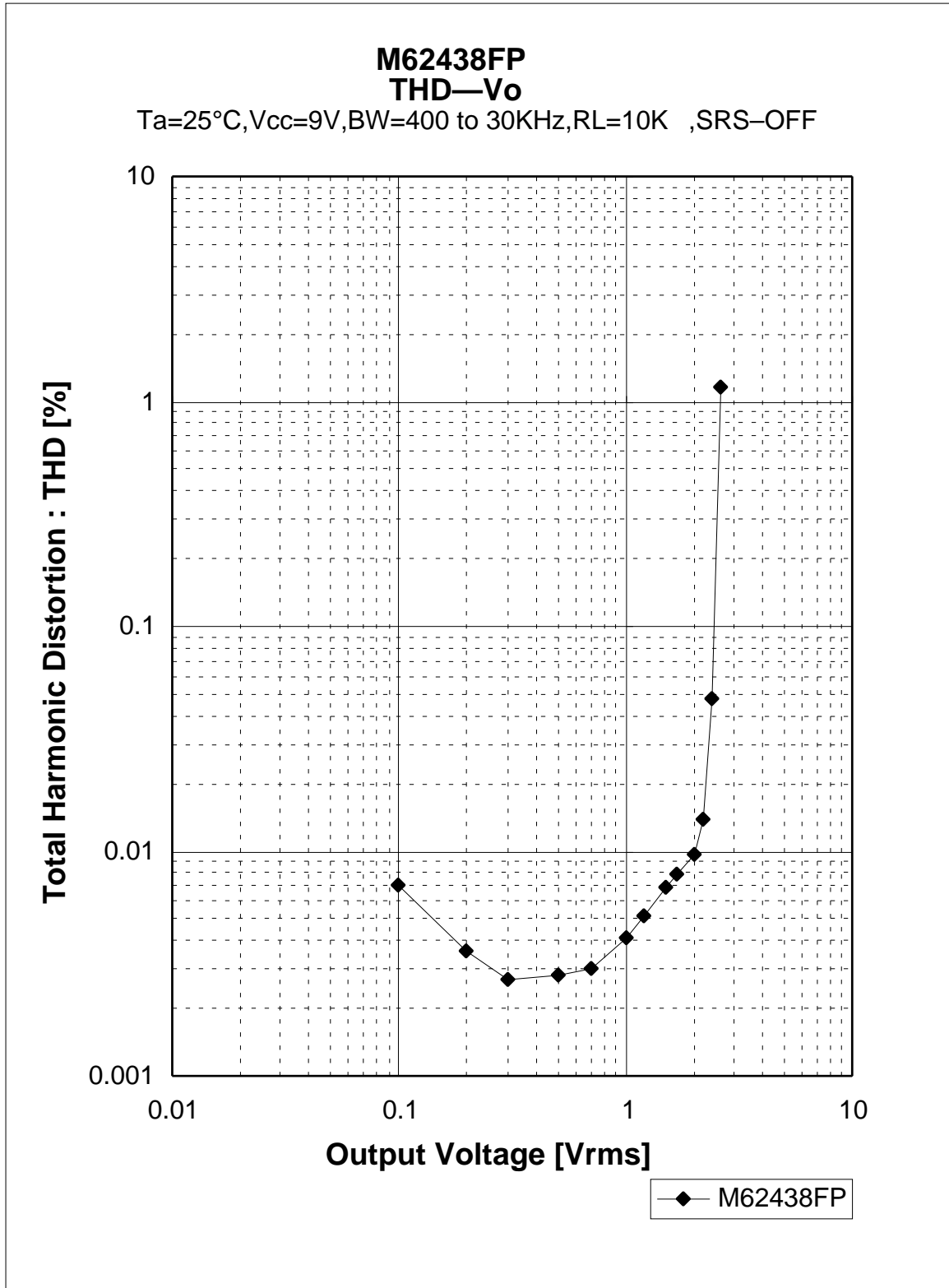
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