CAR AUDIO

7 Band 2 ch Graphic Equalizer [SMD]

EAS1077 is a hybrid IC which contains in its inside seven elements resonance circuits and two circuits of one high performance operational amplifier.

FEATURES

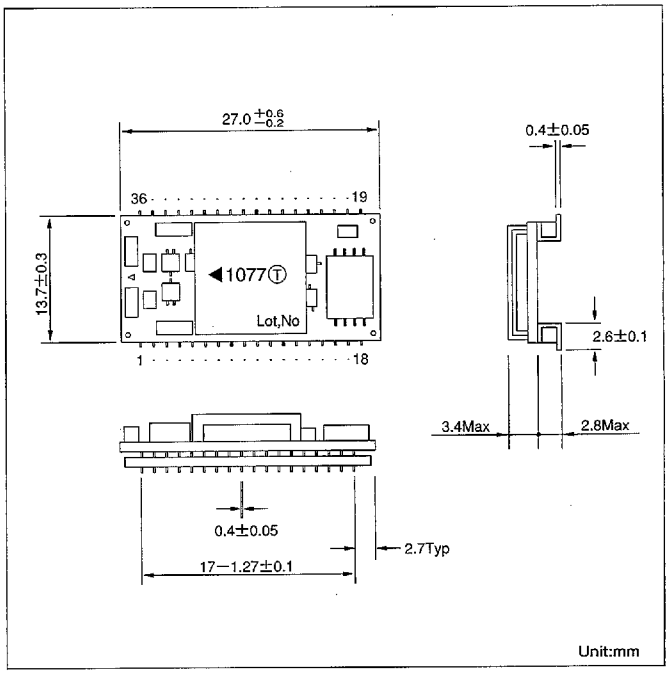
- It contains seven resonance circuits of frequency centers 60Hz, 125Hz, 250Hz, 500Hz, 1kHz, 3kHz, and 10kHz.
- Graphic equalizer circuit can be realized only with outside parts of VR knobs.
- It has an advantageous space factor as it is contained in a single end package.

ABSOLUTE MAXIMUM RATING

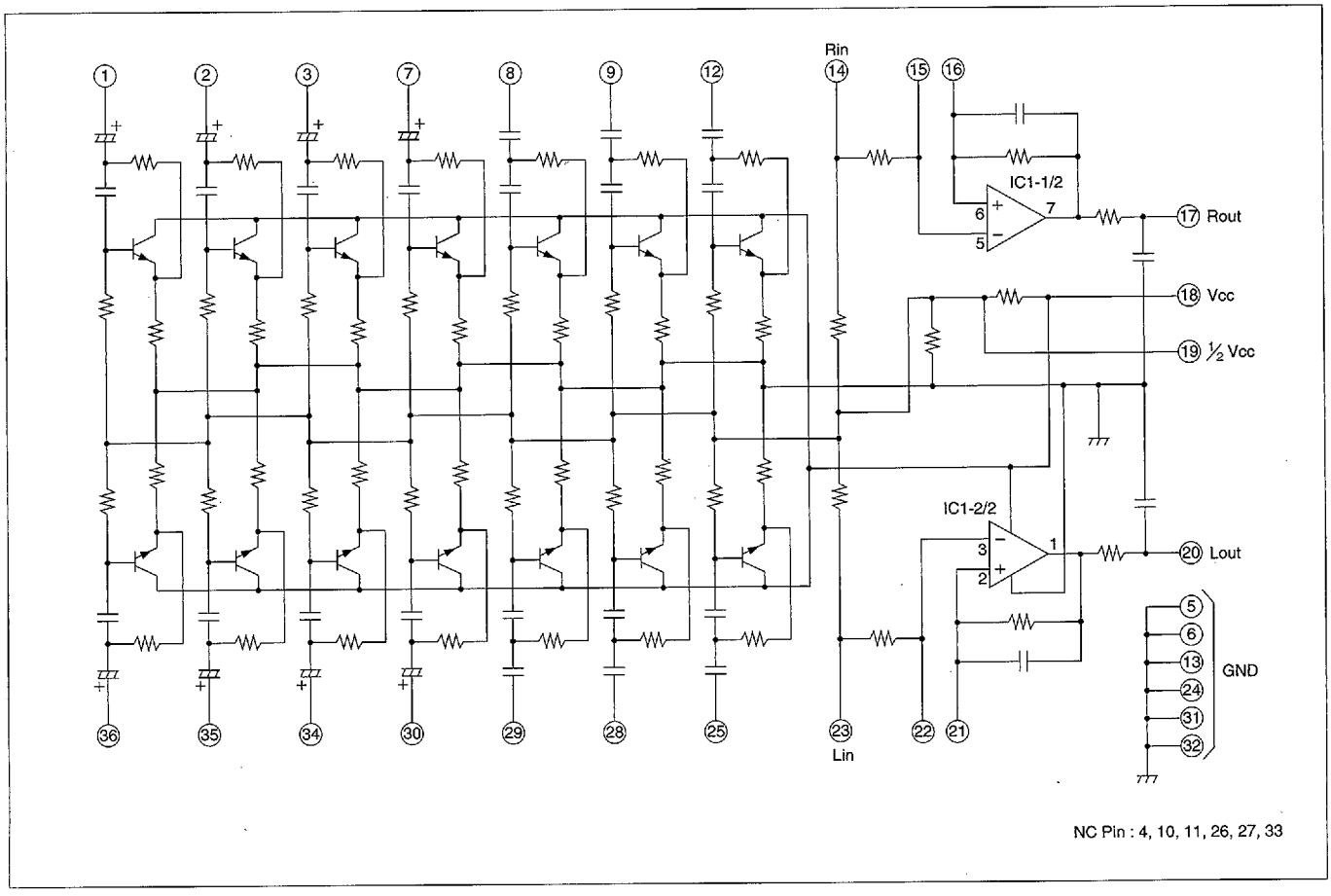
(T_A=25℃)

Item	Symbol	Rating	Unit
Supply voltage	Vcc	18	V
Input voltage	Vin	3	Vp-p
Power dissipation	PD	400	mW
Operating temperature	Topr	−20～+70	℃
Storage temperature	Tstg	−40～+85	℃

OUTLINE DIMENSIONS



INTERNAL CIRCUIT



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ELECTRICAL CHARACTERISTICS

T_A=25℃, Vcc=12.0±0.1V

Frequency centers:60Hz, 125Hz, 250Hz, 500Hz, 1kHz, 3kHz, 20kHz,

No.	Item		Symbol	Specifications Min	Typ	Max	Unit	Condition
1	Supply current		Icc		20	30	mA	Vcc=12V, Short input terminals
2	Voltage gain		Gv	−1.0	0	+1.0	dB	1kHz, 200mVrms input
3	Frequency characteristics		Vf	−2.0	−0.5	+1.0	dB	200mVrms input, 1kHz base, 60Hz–15kHz
4	Total harmonic distortion		THD		0.01	0.1	%	1kHz, 200mVrms output
5	Flat noise level		V_{NF}		5.0	30	μV	Short input terminals, PEAK-DIN/NOISE, filter on
	All boost noise level		V_{NB}		30	90		
6	Right-left level difference		CB	−1.0	0	+1.0	dB	1kHz, 200mVrms input
7	Max. output voltage		Vo max	2.5	3.3		Vrms	1kHz, THD within 1%
8	Tone change *	Boost	V_{TONE}	9	10	12	dB	200mVrms input, each frequency center
		Cut		−13	−10.3	−9		
9	Band ripple *		Vr		8	12	dB	200mVrms input (60Hz–10kHz) all channels boost
10	High-cut filter characteristics		V_H		−3.0	−1.5	dB	200mVrms input, 1kHz base, 50kHz attenuation
11	Operating voltage		Vcc	7		16	V	Operable
12	fo deviation *		Gfo		0	1.5	dB	200mVrms input, drop from each frequency center max gain

Note) All channels to be on flat position in measuring except for marked with *.

TEST CIRCUIT