

CAR AUDIO

Grand Isolator Amplifier

IA1001 is a hybrid IC which is developed for preventing noise from speaker of car audio set due to noise generated by car accessories.

FEATURES

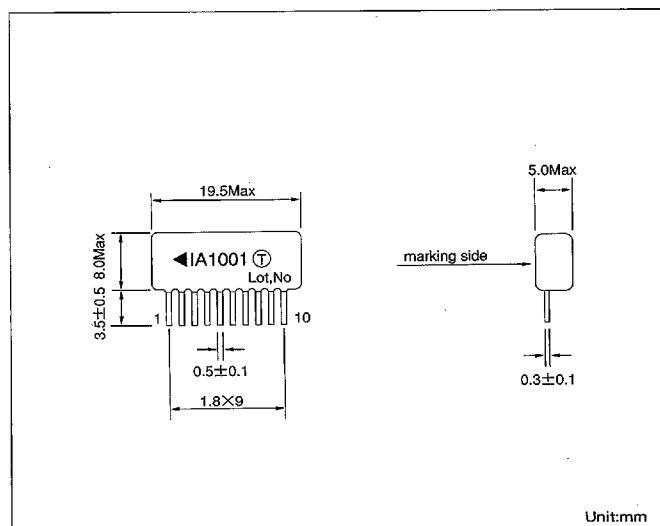
- Heavily coated resistors of high accuracy are used to realize 60dB (typ) as CMRR.
- A super small size single end package with 2ch built-in was realized by application of fine pattern. It has an advantageous space factor.

ABSOLUTE MAXIMUM RATINGS

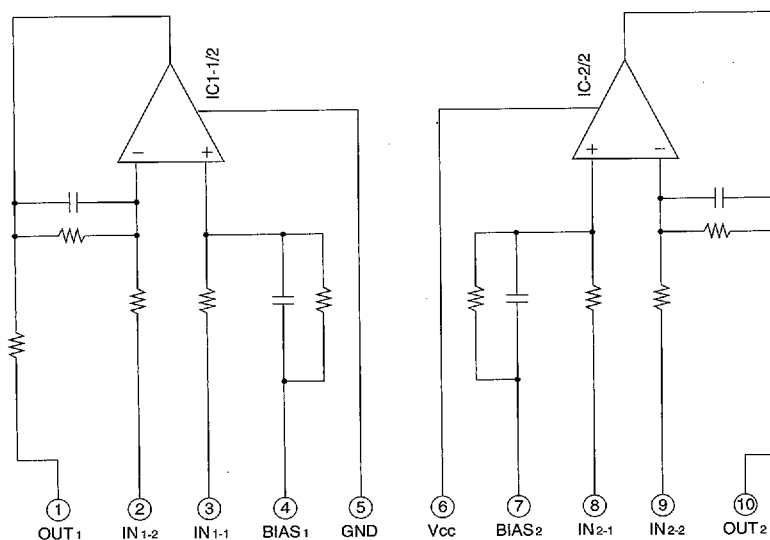
(TA = 25°C)

Item	Symbol	Rating	Unit
Supply voltage	Vcc	18	V
Power dissipation	Pd	120	mW
Operating temperature	Topr	-20 ~ +75	°C
Storage temperature	Tstg	-40 ~ +85	°C

OUTLINE DIMENSIONS



INTERNAL CIRCUIT



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ELECTRICAL CHARACTERISTICS

T_A=25°C, V_{CC}=8.0±0.1V, Impnt level=1Vrms, Unless specified

No.	Item	Symbol	Specifications			Unit	Condition	SW ₁	SW ₂	SW ₃
			Min	Typ	Max					
1	Supply current	I _{cc}		3	8	mA	Quiescent			
2	Voltage gain	G _v	-1.0	0	1.0	dB	f=1kHz	1	1	1
3	Frequency characteristics	V _{f1}	-1.0	0	1.0	dB	f=20Hz	1	1	1
		V _{f2}					f=20kHz			
4	CMRR	V _{cm}		-65	-55	dB	f=1kHz	1	1	2
5	Crosstalk	CT		-70	-65	dB	f=1kHz	1	2	1
								2	1	1
6	Total harmonic distortion	THD		0.01	0.02	%	f=1kHz 30kHz, LPF	1	1	1
7	Output noise voltage	V _N		4.0	10	μV _{rms}	IN:SHORT DIN-AUDIO	2	2	1

TEST CIRCUIT

