SI-1125HD

25W Dual channel Amp with tone control circuit installable in feedback circuit.

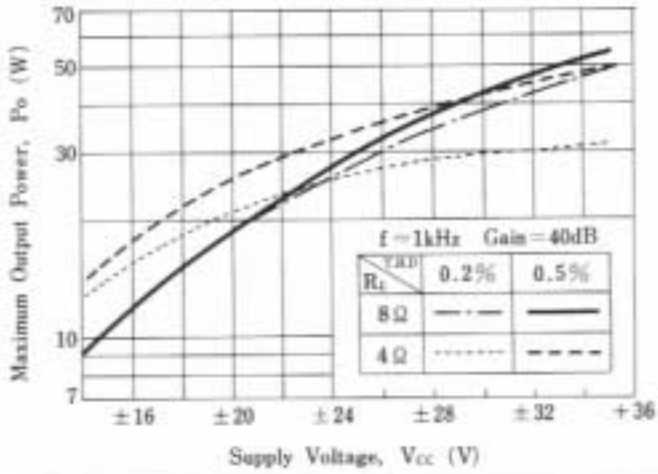
Absolute Maximum Rating (Ta=25℃)

Characteristics		Rating	Conditions
Supply Voltage (V)	V_{CC}	±35	
Operating Temperature (℃)	T_{OP}	−30~100	Heat Sink Temperature
Storage Temperature (℃)	Tstg	−30~120	
Allowable Output Short Time (sec)	ts	2.0	V_{CC}=±35V, P_o=25W, f=1kHz, Specified Power Supply
Junction Temperature (℃)	Tj	150	Junction Temperature of Power Transistor
Thermal Resistance (℃/W)	θj	3.3 max.	Between Junction of Power Transistor and Heat Sink

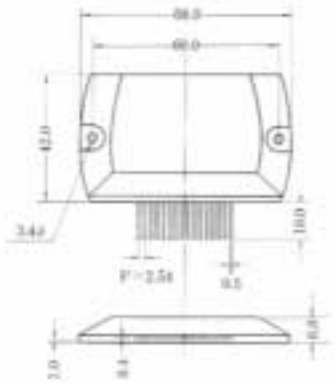
Electrical Characteristics 8Ω(4Ω) Load (per chanel) Ta=25℃

Characteristics		Rating Min.	Rating Typ.	Rating Max.	Conditions
Supply Voltage (V)	V_{CC}		±25 (±22.5)		
Supply Current (A)	I_{CC}		0.8 (1.15)		
Output Power (W)	P_o		25		1kHz, T.H.D.=0.2%
Power Band Width (Hz)	PBW		10~20k		T.H.D.=0.2%, −1dB
Frequency Response (Hz)	f		10~100k		P_o=1W, −1dB
Voltage Gain (dB)	Gv		40		R_1=R_2=56kΩ R_2=560Ω
Input Impedance (kΩ)	Zin	56			R_1=R_3=56kΩ
Idling Current (mA)	I_d	30	50	80	V_{CC}=±32V
Output Noise Voltage (mV)	V_N		1.0	2.0	R_g=10kΩ, Specified Power Supply
Output Quiescent Point Voltage (mV)	V_o			±100	V_{CC}=±20V~±35V

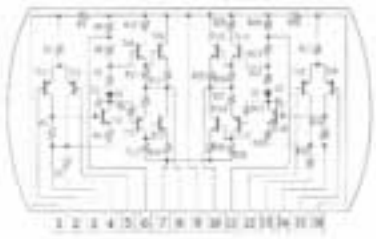
SUPPLY VOLTAGE-MAXIMUM OUTPUT POWER



OUTLINE DRAWINGS in mm

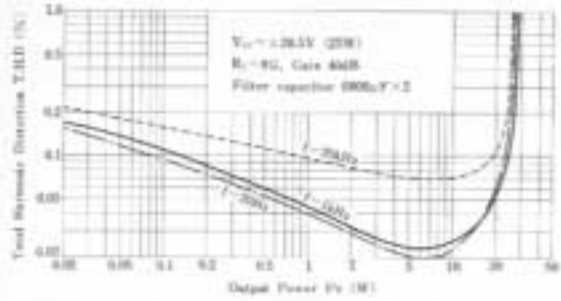


SCHEMATIC

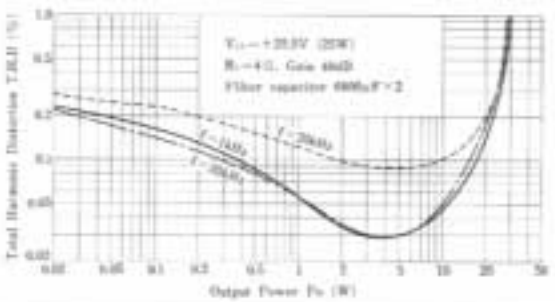


1.16. Ripple Filter Capacitor (+)
2.15. Input Capacitor (−)
3.14. Ripple Filter Capacitor (−)
4.13. Power Supply ($-V_{cc}$)
5.12. Feedback Resistor
6.11. Bootstrap Capacitor (+)
7. Power Supply ($-V_{cc}$)
8. CH−2 Output
9. Power Supply ($+V_{CC}$)
10. CH−1 Output

HARMONIC DISTORTION ($R_L = 8\Omega$)



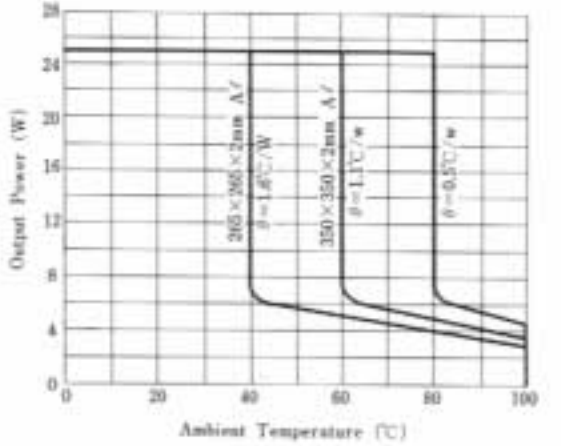
HARMONIC DISTORTION ($R_L = 4\Omega$)



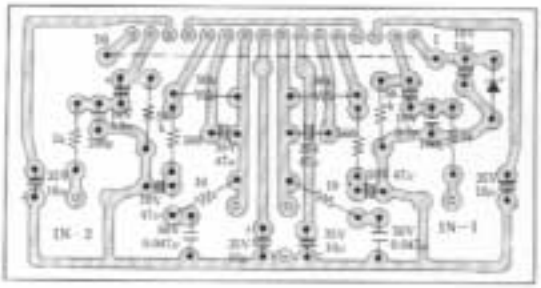
POWER BANDWIDTH (THD = 0.5%)

POWER BANDWIDTH (THD = 0.2%)

POWER DERATING



PC BOARD EXAMPLE



RECOMMENDED CONNECTIONS