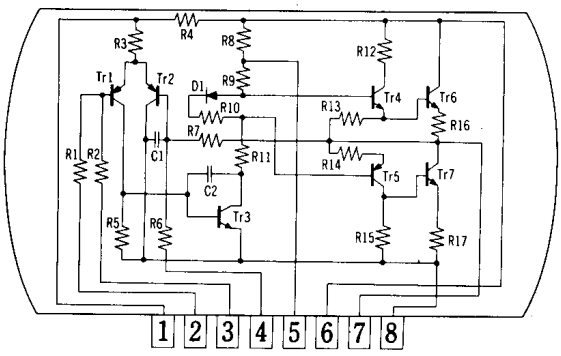
:LECTRICAL CHARACTERISTICS

At 25℃ ambient, 1kHz R_L= 4 Ω (8 Ω)

Characteristics	SI−1020GL	SI−1030GL	SI−1050GL
Maximum rms Power	20W	30W	50W
Supply Voltage	±17V (±23V)	±22V (±27V)	±25V (±33V)
Absolute Max. Supply Voltage	±27.5V	±30V	±40V
Supply Current (ave.)	1.00A (0.72A)	1.23A (0.86A)	1.59A (1.1A)
Protective Fusing	1.5A Quick Blow	1.5A Quick Blow	2.0A Quick Blow
Harmonic Distortion at Full Output	0.5% max	0.5% max	0.5% max
Input Voltage	0.28V(0.42V)typ.	0.35V(0.52V)typ.	0.45V(0.70V)typ.
Maximum Input Voltage	1 V	1 V	1 V
Voltage Gain Full Feedback (P_O=1W)	30dB typ.	30dB typ.	30dB typ.
Input Impedance	30k ohms typ.	30k ohms typ.	40k ohms typ.
Output Impedance (P_O=1W)	0.2 ohms typ.	0.2 ohms typ.	0.2 ohms typ.
Load Current (rms)	2.22A(1.58A)typ.	2.73A(1.94A)typ.	3.53A(2.50A)typ.
Output Voltage (rms)	8.94V(12.7V)typ.	11.0V(15.5V)typ.	14.1V(20.0V)typ.
Signal to Noise Ratio (Input Shorted)	90dB typ.	90dB typ.	90dB typ.
Idling Current	20mA typ.	20mA typ.	20mA typ.
Frequency Range (P_O=1W)	10Hz to 100kHz	10Hz to 100kHz	10Hz to 100kHz
Power Bandwidth (−3dB)	10Hz to 50kHz	10Hz to 50kHz	10Hz to 30kHz
Operating Temperature	−20℃ to +80℃	−20℃ to +80℃	−20℃ to +80℃
Storage Temperature	−30℃ to +100℃	−30℃ to +100℃	−30℃ to +100℃
Built-in Protection	——	——	current limiting

CHEMATIC

(SI-1020GL & SI-1030GL)

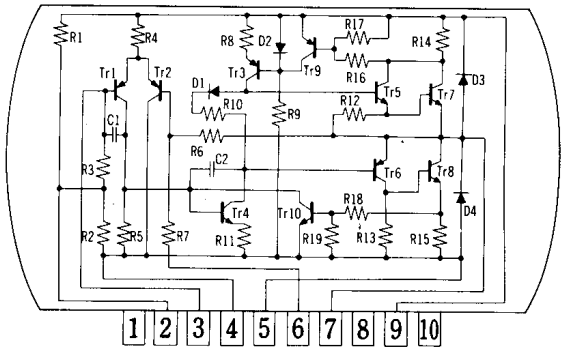


TERMINAL ASSIGNMENTS

With split (dual) power supply

1. Ripple filter capacitor (+)
2. Input
3. GND
4. Bypass capacitor (+)
5. Boot strap capacitor (+)
6. Power supply (+)
7. Output
8. Power supply (−)

(SI-1050GL)



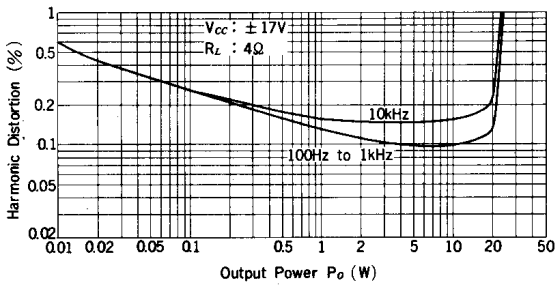
TERMINAL ASSIGNMENTS

With split (dual) power supply

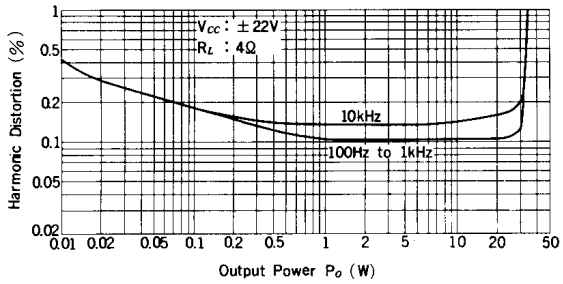
1. NC
2. Input (−) & ground terminal
3. Input (+)
4. Not used
5. Power supply (−Vcc)
6. Feedback
7. Output
8. NC
9. Power supply (+Vcc)
10. NC

TYPICAL CHARACTERISTIC CURVES

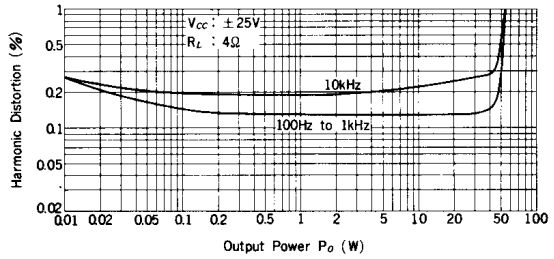
HARMONIC DISTORTION-OUTPUT POWER (SI-1020GL)



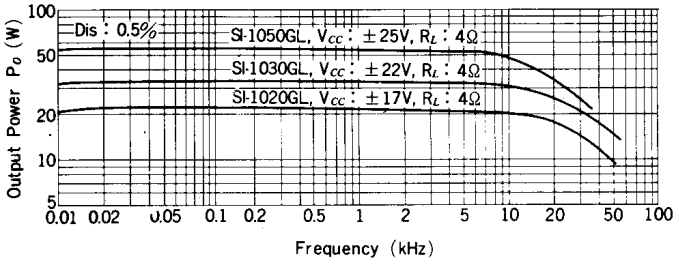
HARMONIC DISTORTION-OUTPUT POWER (SI-1030GL)



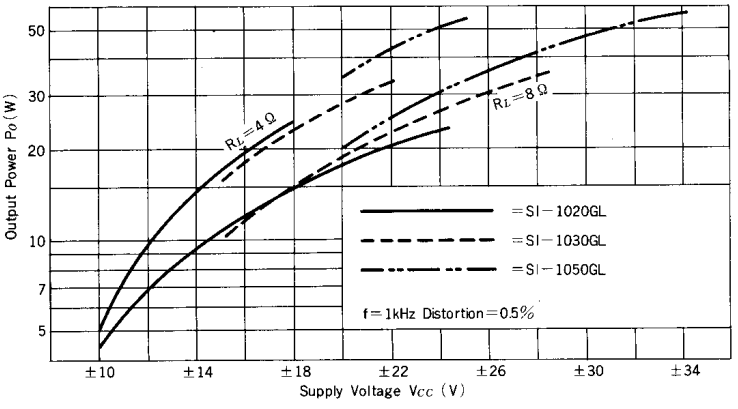
HARMONIC DISTORTION-OUTPUT POWER (SI-1050GL)



POWER BANDWIDTH

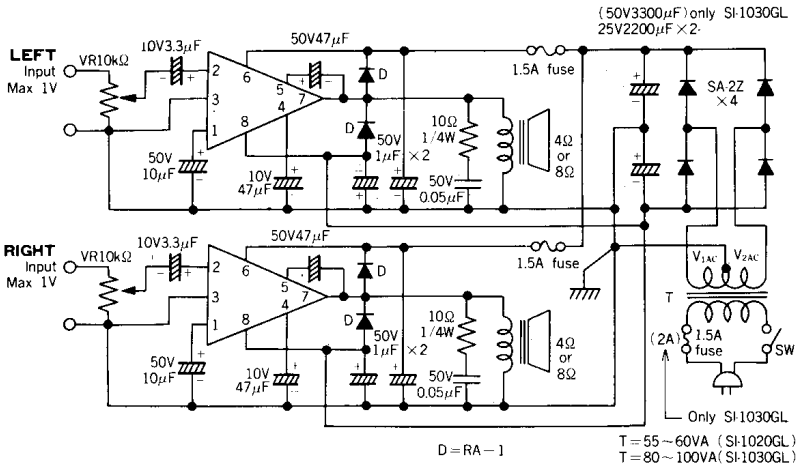


SUPPLY VOLTAGE-MAXIMUM OUTPUT POWER



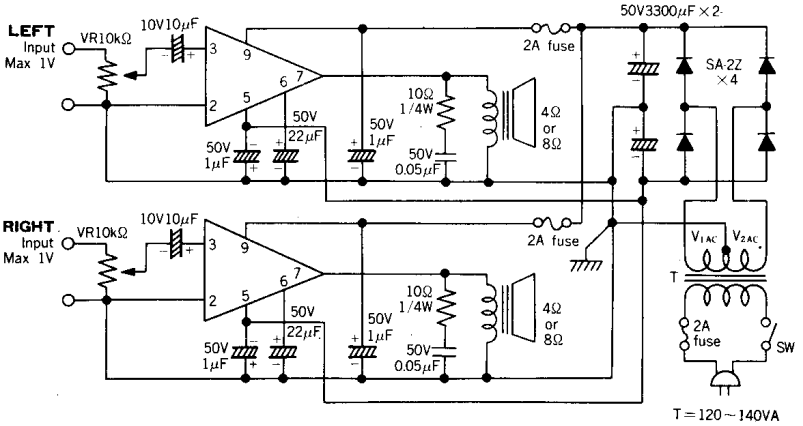
RECOMMENDED CONNECTIONS (A : SI-1020GL & SI-1030GL B : SI-1050GL)

A.



	Load	V_{1AC} V_{2AC}	I_{AC}
SI-1020GL	4 Ω	13~14V	2.0A
	8 Ω	18~19V	1.5A
SI-1030GL	4 Ω	17~18V	2.5A
	8 Ω	20~21V	1.8A

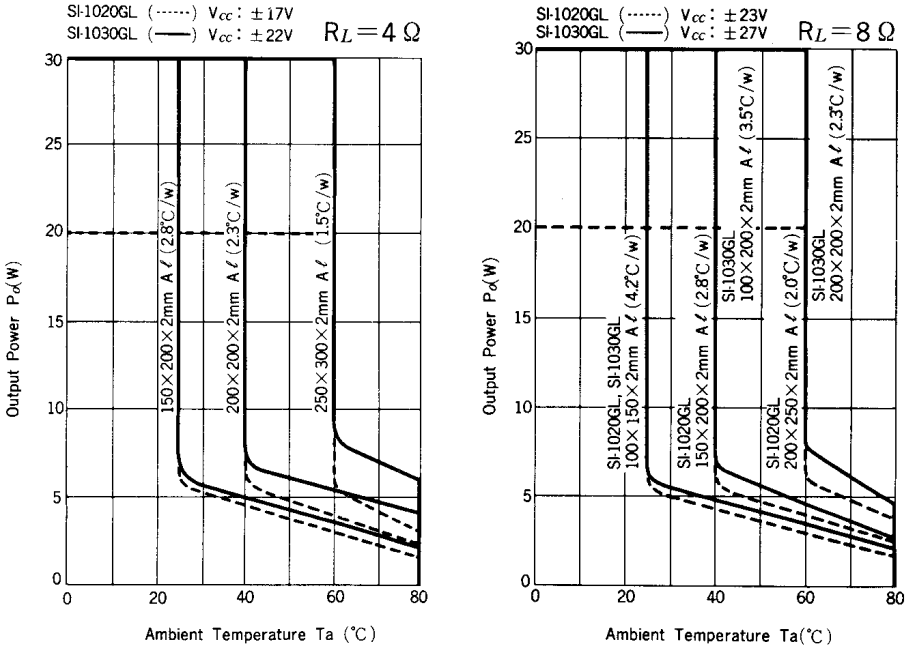
B.



	Load	V_{1AC} V_{2AC}	I_{AC}
SI-1050GL	4 Ω	20V	3.2A
	8 Ω	26V	2.2A

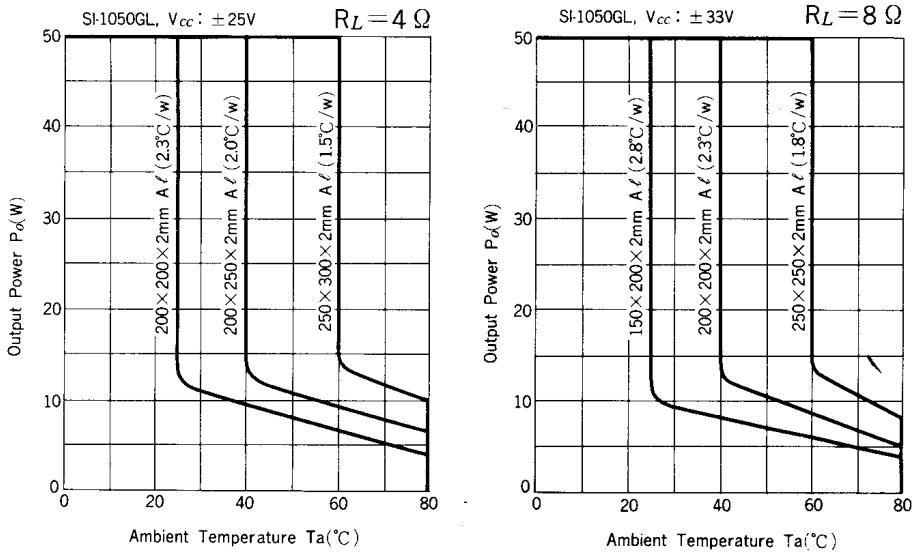
POWER DERATING

(SI-1020GL & SI-1030GL)



Note : Design heat sink to keep case temperature below 80℃.

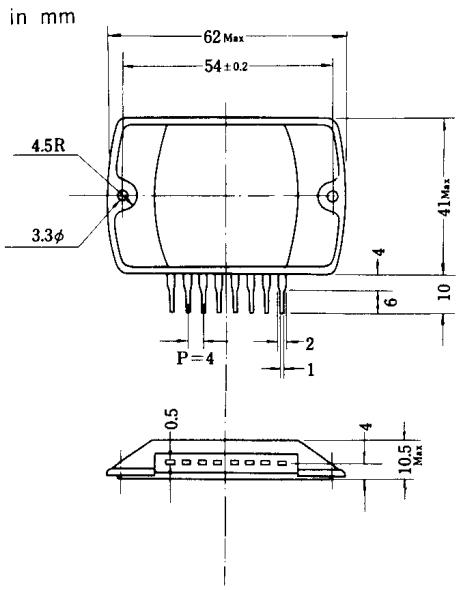
(SI-1050GL)



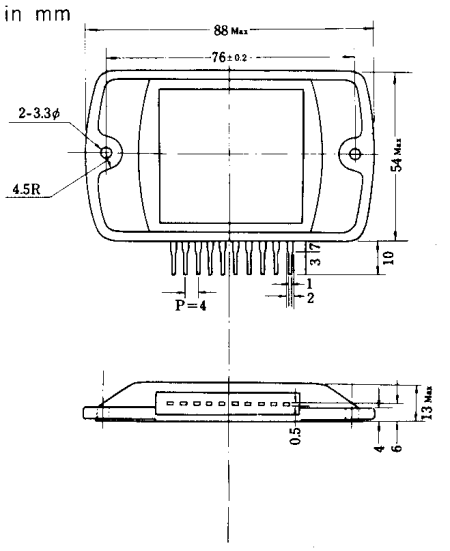
Note : Design heat sink to keep case temperature below 80℃.

OUTLINE DRAWINGS

(SI-1020GL & SI-1030GL)



(SI-1050GL)



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