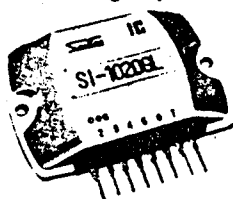


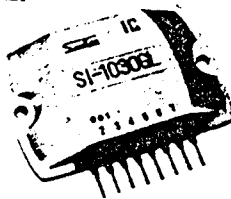


SERIES SI-1000GL

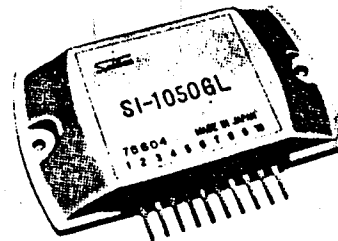
Series SI-1000GL amplifiers are self-contained power hybrid amplifiers. The amplifiers have quasi-complementary class AB output. The circuit employs flip-chip transistors with high reliability and passivated chip power transistors with excellent secondary breakdown strength. Built-in current limiting is provided for SI-1050GL.



SI-1020GL
(20W output)



SI-1030GL
(30W output)



SI-1050GL
(50W output)

- * Especially designed for Hi-Fi Stereo amplifiers.
- * Less than 0.5% harmonic distortion at full power level.
- * 1/2 dB response from 10 to 100,000Hz.
- * Built-in current limiting (for SI-1050GL) and efficient heat radiating construction.
- * Rugged, compact and light weight packages.

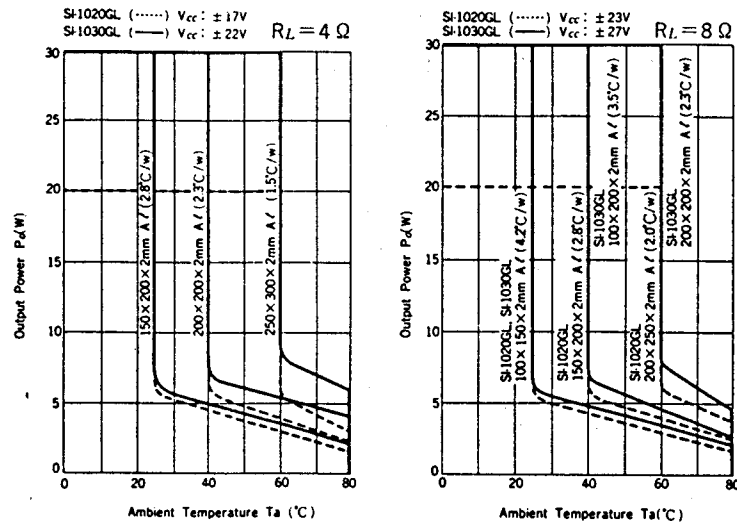
IMPORTANT - The SI-1020GL and SI-1030GL amplifiers are designed for 4 ohm application only. If load resistance is 8 ohms, advance notice must be given to Sanken or its representative to adjust idling current before shipment.
The SI-1050GL amplifier will accommodate either 4 or 8 ohm application without adjustment.

ELECTRICAL CHARACTERISTICS

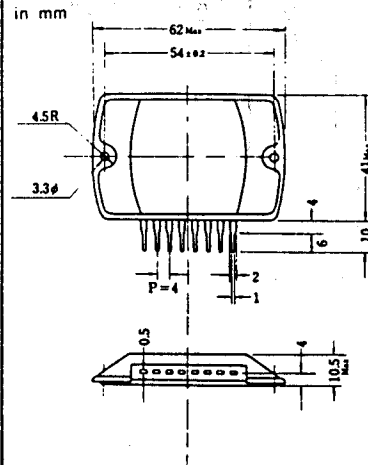
At 25°C ambient, 1kHz $R_L = 4 \Omega$ (8 Ω)

Characteristics	SI-1020GL	SI-1030GL	SI-1050GL
Maximum rms Power	20W	30W	50W
Supply Voltage	$\pm 17V$ ($\pm 23V$)	$\pm 22V$ ($\pm 27V$)	$\pm 25V$ ($\pm 33V$)
Absolute Max. Supply Voltage	$\pm 27.5V$	$\pm 30V$	$\pm 40V$
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°C to +80°C	-20°C to +80°C	-20°C to +80°C
Storage Temperature	-30°C to +100°C	-30°C to +100°C	-30°C to +100°C
Built-in Protection	—	—	current limiting

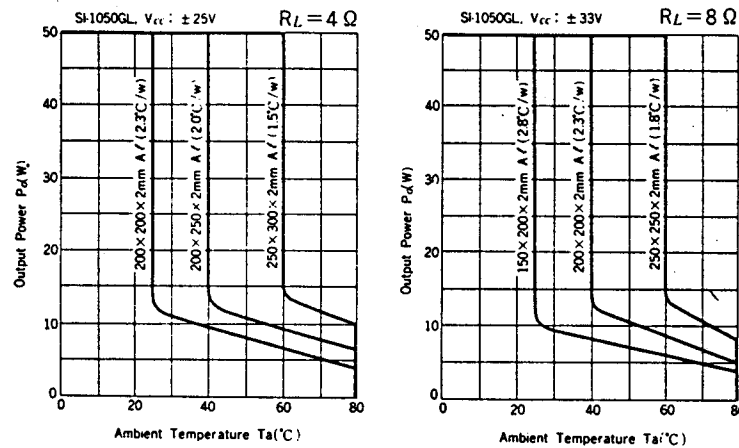
(SI-1020GL & SI-1030GL)



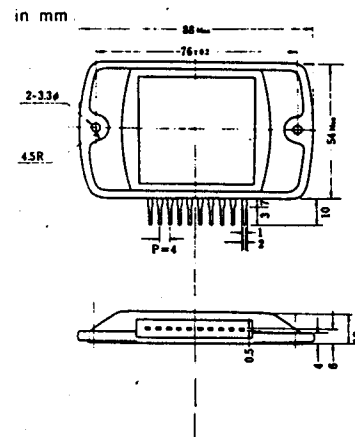
(SI-1020GL & SI-1030GL)



(SI-1050GL)

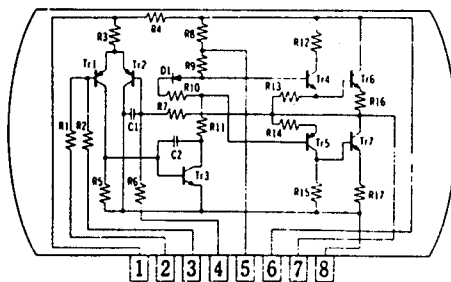


(SI-1050GL)



SCHEMATIC

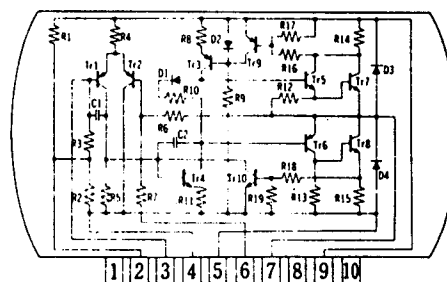
(SI-1020GL & SI-1030GL)



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 (-)

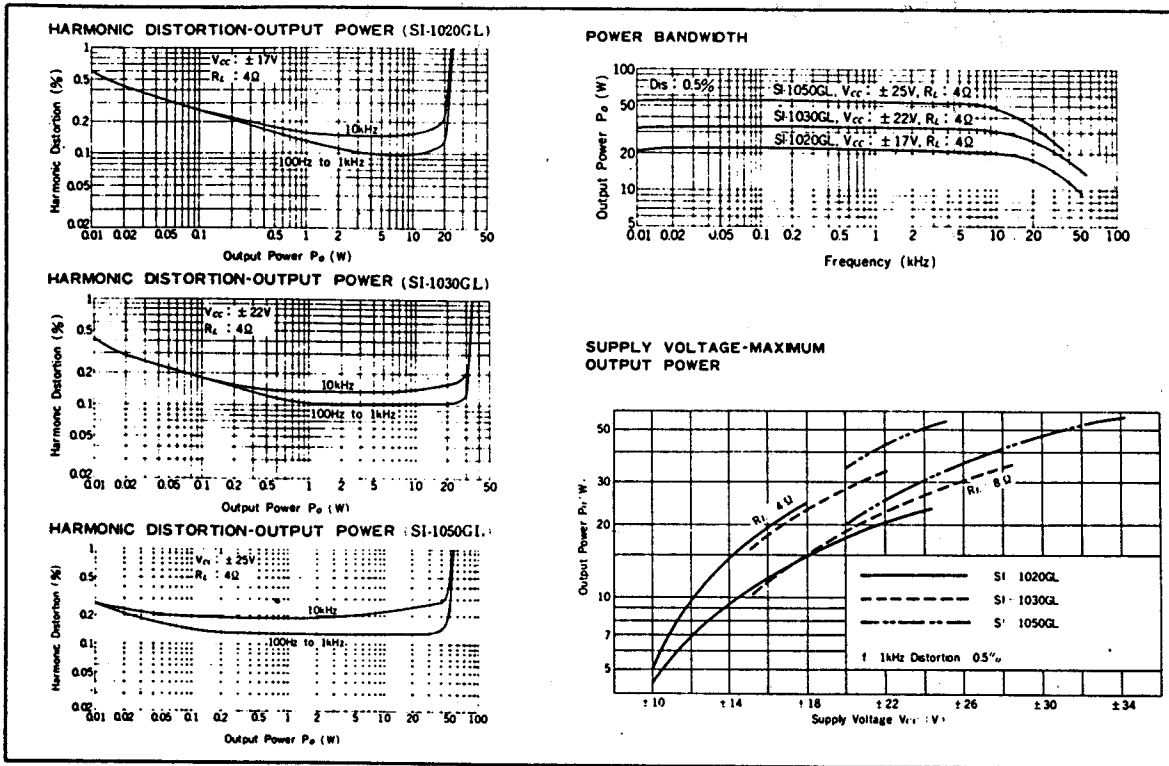
(SI-1050GL)



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



RECOMMENDED CONNECTIONS

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

