No.1625

STK4913

Thick Film Hybrid Integrated Circuit
2-CHANNEL 50W MIN AF POWER AMP
(DUAL-SUPPLY)

Features

- Contains the emitter follower circuit for upgrading.
- Case temperature 125°C is guaranteed, thereby greatly reducing the heat sink.
- Pop noise generated at the time of power ON/OFF can be rejected by a muting circuit connected externally.

Maximum Ratings at Ta=25°C

				unit
Maximum Supply Voltage	V_{CC}max		±50	V
Thermal Resistance	θj-c		1.5	°C/W
Junction Temperature	Tj		150	°C
Operating Case Temperature	T_C		125	°C
Storage Temperature	Tstg		-30 to +125	°C
Available Time for Load Shorted	t_s	V_{CC}=±35V, R_L=8ohm, Po=50W, f=50Hz	2	sec

Recommended Operating Conditions at Ta=25°C

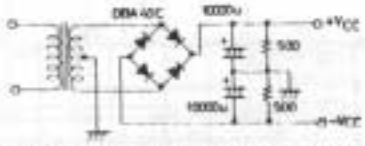
			unit
Recommended Supply Voltage	V_{CC}	±35	V
Load Resistance	R_L	8	ohm

Operating Characteristics at Ta=25°C, V_{CC}=±35V, R_L=8ohm(non-inductive), Rg=600ohm, VG=40dB, at specified Test Circuit(based on Sample Application Circuit)

			min	typ	max	unit
Quiescent Current	Icco	V_{CC}=±42V	35	70	120	mA
Output Power	Po	THD=0.02%, f=20Hzto20kHz	50			W
Total Harmonic Distortion	THD	Po=1W, f=20Hz to 20kHz			0.02	%
Frequency Response	f_L, f_H	Po=1W, $^{+0}_{-3}$dB	10 to 100k			Hz
Input Resistance	r_i	Po=1W, f=1kHz		32k		ohm
Output Noise Voltage	V_{NO}	V_{CC}=±42V, Rg=10kohm			1.2mVrms	
Output Middle-Point Voltage	V_N	V_{CC}=±42V	-70	0	+70	mV

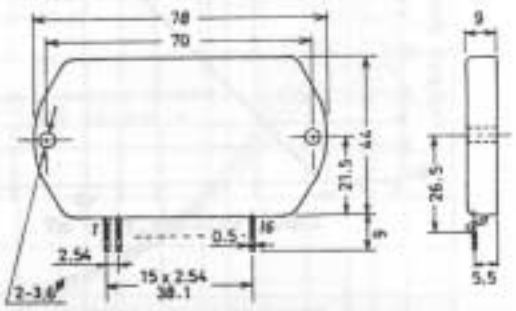
(Note)

- For power supply at the time of test, use a constant-votlage power supply unless otherwise specified.
- For measurement of the available time for load shorted and output noise voltage, use the specified transformer power supply shown right.
- The output noise voltage is represented by the peak value on rms scale (VTVM) of average value indicating type. For AC power supply, use an AC stabilized power supply (50Hz) to eliminate the effect of flicker noise in AC primary line.



Specified transformer power supply
(Equivalent to MG200)

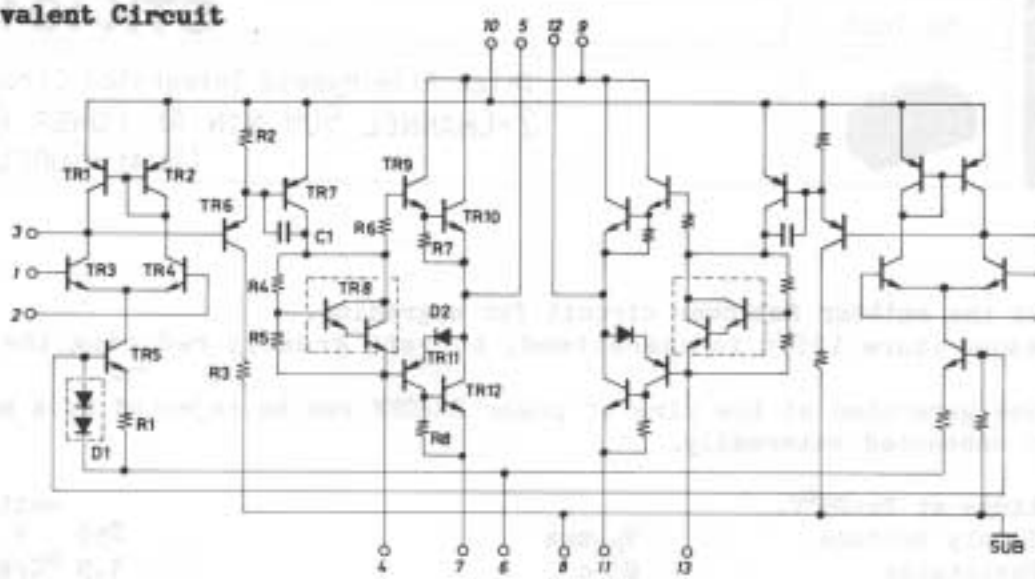
Case Outline 4029
(unit:mm)



These specifications are subject to change without notice.

TOKYO SANYO ELECTRIC CO., LTD. SEMICONDUCTOR DIVISION
15-13, 6-CHOME, SOTOKANDA, CHIYODA-KU, TOKYO 101 JAPAN

Equivalent Circuit



Sample Application Circuit : 50W min 2-channel AF Power amp