STK4152 II

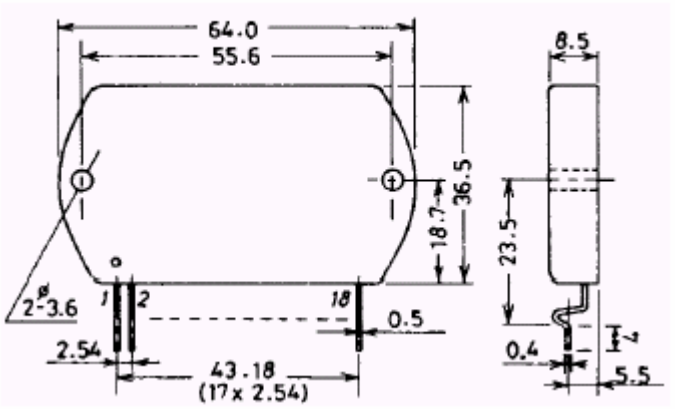
AF Power Amplifier (Split Power Supply)

◆ Features

. the STK4152 II series and STK4101V series (high-grade type) are pin-campatible in the output range of 6 to 50W and enable easy design
. Built-in muting circuit to cut off various kinds of pop noise
. Greatly reduced heat sink due to substrate temperature 125℃ guaranteed
. Excellent cost performance

Package Dimensions

unit:mm [STK4152II]



Specifications

◆ Maximum Ratings at Ta=25℃

Parameter	Symbol	Conditions	Ratings	UNIT
Maximum supply voltage	V_{CC} max		±42	V
Thermal resistance	θj-c		2.1	℃/W
Junction temperature	Tj		150	℃
Operating substrate temperature	Tc		125	℃
Storage temperature	Tstg		-30 to+125	℃
Available time for load short-circuit	ts	V_{CC}=±27.5V,R_L=8Ω,f=50Hz,P_O=30W	2	s

◆ Recommended operating conditions at Ta=25℃

Parameter	Symbol	Conditions	Ratings	UNIT
Recommended supply voltage	V_{CC}		±27.5	V
Load resistance	R_L		8	Ω

◆ Operating characteristics at Ta=25℃,V_{CC}=±27.5V,RL=8Ω,Rg=600Ω,VG=40dB,

R_L:non-inductive load

Parameter	Symbol	Conditions	min	typ	max	unit
Quiescent current	I_{CCO}	V_{CC}=±33V	20	40	100	mA
Output power	P_O (1)	THD=0.4% f=20Hz to 20kHz	30			W
	P_O (2)	V_{CC}=±25V,THD=1.0% R_L=4Ω,f=1kHz	35			W
Total harmonic distortion	THD	P_O=1.0W,f=1kHz			0.3	%
Frequency response	f_L, f_H	P_O=1.0W, +0 dB -3		20 to 50k		Hz
Input impedance	r_j	P_O=1.0W,f=1kHz		55		kΩ
Output noise voltage	V_{NO}	V_{CC}=±33V,Rg=10 kΩ			1.2	mVrms
Neutral voltage	V_N	V_{CC}=±33V	-70	0	+70	mV
Muting voltage	V_M		-2	-5	-10	V