



No. 1153

STK0100II



Thick Film Hybrid Integrated Circuit  
100W MIN AF POWER AMP. OUTPUT STAGE (DPP)

Features

- Dual supplies, 1 channel
- 3-stage Darlington configuration (Symmetrical complementary circuit)
- Metal substrate makes good thermal stability because of built-in temperature compensator.
- 100W min AF power amp. output stage (DPP) for very low distortion
- Pins arranged in one direction enables standardization of external printed circuit board.

Maximum Ratings/ $T_a = 25^\circ\text{C}$

Maximum supply voltage	$V_{CC}$ max	$\pm 75$	V	unit
Thermal resistance	$\theta_{j-c}$	1.0	$^\circ\text{C}/\text{W}$	
Collector current	$I_C$	15	A	
Junction temperature	$T_j$	150	$^\circ\text{C}$	
Storage temperature	$T_{stg}$	$-30 \sim +105$	$^\circ\text{C}$	

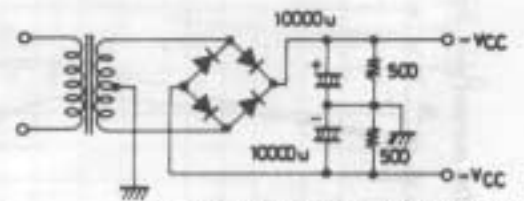
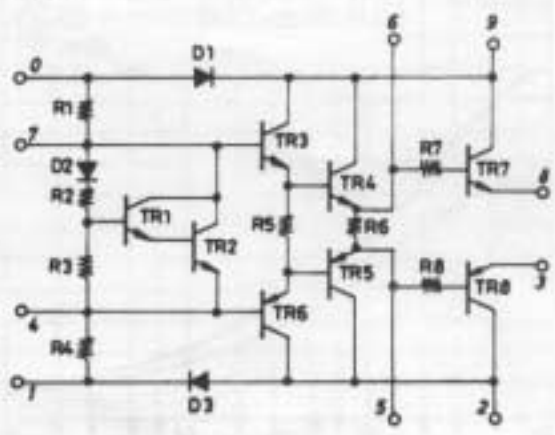
Recommended Operating Conditions/ $T_a = 25^\circ\text{C}$

Recommended supply voltage	$V_{CC}$	$\pm 52$	V	unit
Load resistance	$R_L$	8	$\Omega$	

Operating Characteristics/ $T_a = 25^\circ\text{C}$ ,  $V_{CC} = \pm 52\text{V}$ ,  $R_L = 8\Omega$ ,  $R_g = 600\Omega$ ,  $V_G = 36.7\text{dB}$ , at specified test circuit (based on Sample Application Circuit)

			min	typ	max	unit
Quiescent current	$I_{CCO}$	$V_{CC} = \pm 60\text{V}$	20	40	70	mA
Output power	$P_O$	THD = 0.01%, $f = 20\text{Hz} \sim 20\text{kHz}$	100			W
Total harmonic distortion	THD(1)	$P_O = 100\text{W}$ , $f = 20\text{Hz} \sim 20\text{kHz}$		0.005	0.01	%
	THD(2)	$P_O = 1\text{W}$ , $f = 20\text{Hz} \sim 20\text{kHz}$			0.01	%
Power bandwidth	PBW	$P_O = 50\text{W}$ , $f = 50\text{kHz}$		0.05		%

Equivalent Circuit



Specified Transformer Power Supply (Equivalent to Tango MG-200)

Case Outline 4007 (unit: mm)

