

STK-430 SERIES

thick film-IC

2-CHANNEL 5 to 28 Wmin AF POWER AMP.

STK-433E (5 W) STK-435E (7 W) STK-436E (10 W) STK-437E (12 W) STK-439E (16 W) STK-441E (24 W) STK-443E (28 W)

General Description

STK-430 series is, as a small and medium output IC, well suited for the main amplifier of general home stereo. The single-end type with two channels incorporated makes the mounting easy and the standardization with the same pin arrangement up to 5 W to 28 W brings about a higher cost performance.

Features

- © IMST, 2 Channels by 1 Power Supply.
- Direct-coupling emitter feedback type at all stages.
- One power source and small pop noise.

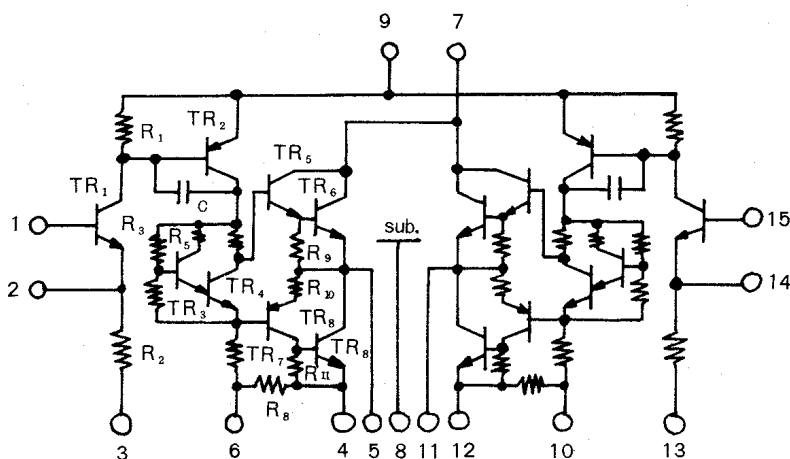
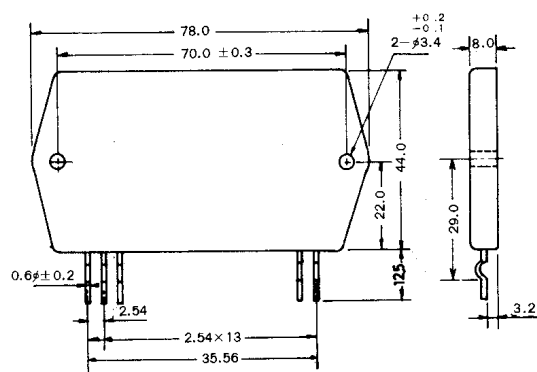
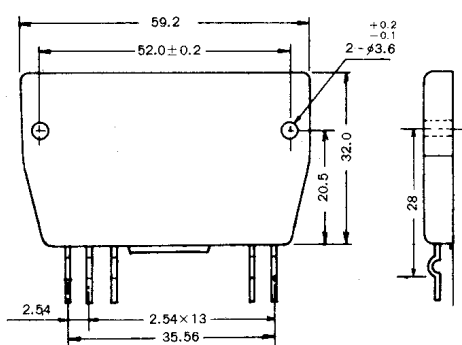
ABSOLUTE MAXIMUM RATINGS at $T_a = 25^\circ\text{C}$

		STK -433E	-435E	-436E	-437E	-439E	-443E	-441E	Unit
Maximum Supply Voltage	V_{CC} max	32	39	50	50	56	63	70	V
Operating Case Temperature	T_C max				90				$^\circ\text{C}$
Storage Temperature	T_{stg}				-30 ~ +100				$^\circ\text{C}$
Allowable Load Shorting Time (In appointed condition)	t_s				2				sec

ELECTRICAL CHARACTERISTICS at $T_a = 25^\circ\text{C}$

		STK -433E	-435E	-436E	-437E	-439E	-441E	-443E	Unit
Recommended Supply Voltage ($R_L = 4 \text{ ohm}$)	V_{CC}	20	24	27	30	34	39	44	V
Quiescent Current	I_{cco} (typ)				60				mA
	I_{cco} (max)				120				mA
Output Power ($f = 40\text{Hz}$ to 15kHz)									
(THD<1% $R_L = 4 \text{ ohm}$)	P_o ($R_L = 4 \text{ ohm}$)	5	7	10	12	16	24	28	W
Total Harmonic Distortion	THD								
($P_o = 1\text{W}$, $f = 1\text{kHz}$, $R_L = 4 \text{ ohm}$)					0.3				%
Inter Modulation Distortion	IMD (typ)								
($P_o = 1\text{W}$, $f = 70\text{Hz}$: $7\text{kHz} = 4:1$)	$R_L = 4 \text{ ohm}$ (typ)	0.5	0.5	0.5	0.2	0.2	0.2	0.2	%
Input Impedance	R_i (typ)				120				k ohm
Open Loop Gain	G_o (typ)				82				dB
Closed Loop Gain	G_o (typ)				40				dB
Frequency Response	f_L f_H				10 ~ 100k				Hz
Output Noise	V_{NO} (typ)				0.4				mV

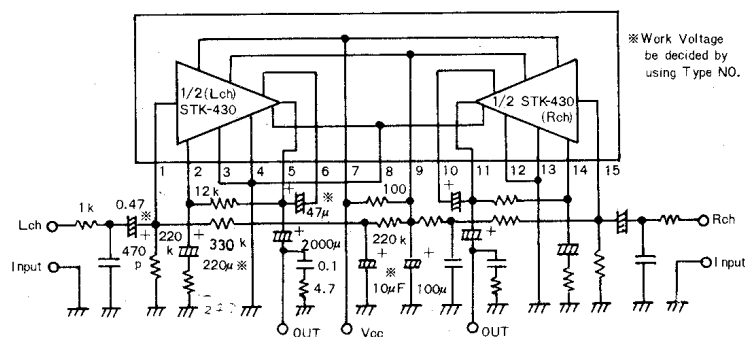
EQUIVALENT CIRCUIT

**PACKAGE DIMENSION (UNIT: mm)**

STK-433E STK-435E STK-436E

STK-437E STK-439E STK-441E STK-443E

MEASURING CIRCUIT



PRINTED PATTERN DESIGN (Bottom View), MEASURING CIRCUIT

