

**SANYO**

No.2717

**LA4497, 4498**

Monolithic Linear IC  
 Car Stereo-Use  
 BTL-OCL 20W AF Power Amp

**Features**

- High output
- Excellent ripple rejection
- Low pop noise at the time of power ON/OFF
- Pin compatible with LA4495, 4496

**Functions**

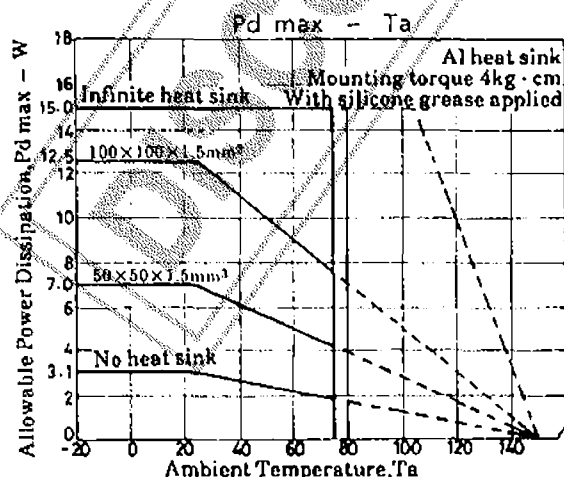
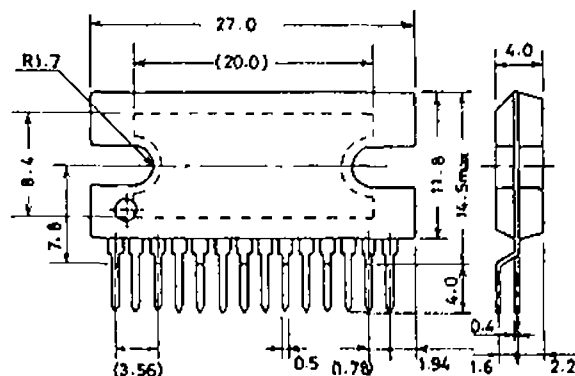
- On-chip standby circuit
- On-chip pop noise preventer (Starting time : 0.6 to 0.8sec.)
- Thermal shutdown circuit
- Overvoltage/surge protector
- On-chip output pin-to-GND short protector (with speaker protection)
- On-chip output pin-to-V<sub>CC</sub> short protector (with speaker protection)
- On-chip load short protector

**Maximum Ratings at Ta = 25°C**

			unit
Maximum Supply Voltage	V <sub>CC</sub> max1	Quiescent, t = 30sec	26 V
	V <sub>CC</sub> max2	Quiescent	18 V
	V <sub>CC</sub> max3	Operating	16 V
Surge Supply Voltage	V <sub>CC</sub> surge	t ≤ 0.2sec, single giant pulse	50 V
		rise time 1μsec	
Output Current	I <sub>o</sub>		4 A
Thermal Resistance	θ <sub>j-c</sub>		3 °C/W
Junction Temperature	T <sub>j</sub>		150 °C
Allowable Power Dissipation	P <sub>d</sub> max		15 W
Operating Temperature	T <sub>opg</sub>		-20 to +75 °C
Storage Temperature	T <sub>stg</sub>		-40 to +150 °C

**Operating Conditions at Ta = 25°C**

		unit
Recommended Supply Voltage	V <sub>CC</sub>	13.2 V
Recommended Load Resistance	R <sub>L</sub>	4 Ω

**Case Outline 3113-S14HZ IC**  
(unit: mm)

Specifications and information herein are subject to change without notice. SANYO: S1P14HZ

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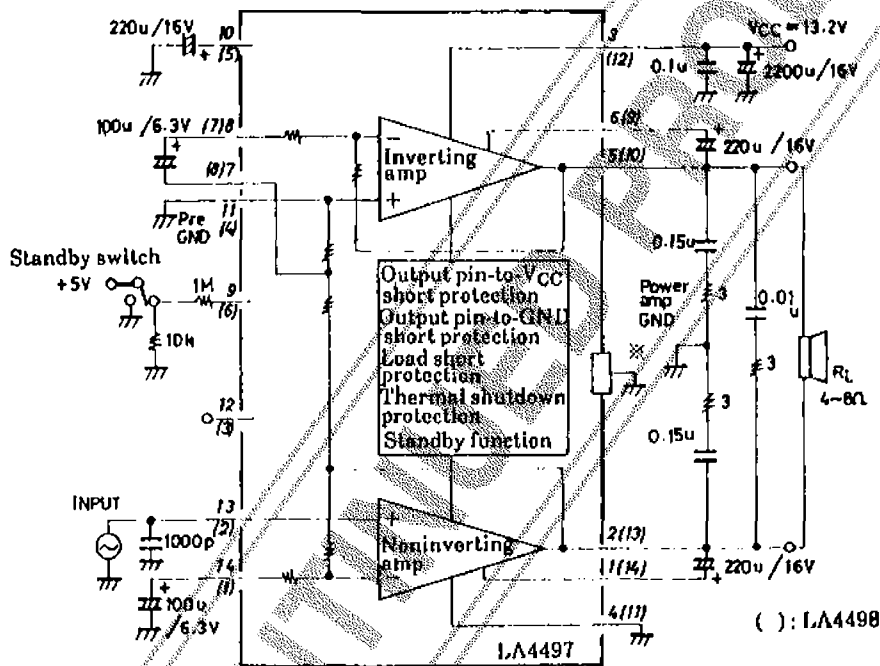
1098TA, TS No.2717-1/2

# LA4497,4498

Operating Characteristics at  $T_a = 25^\circ\text{C}$ ,  $V_{CC} = 13.2\text{V}$ ,  $R_L = 4\Omega$ ,  $f = 1\text{kHz}$ ,  $R_g = 600\Omega$ ,  
with  $100 \times 100 \times 1.5\text{mm}^3$  Al heat sink, standby switch ON

			min	typ	max	unit
Quiescent Current	$I_{CCO}$		40	80	160	mA
Output Power	$P_o(1)$	THD = 10%	16	20		W
	$P_o(2)$	THD = 1%		14		W
Output Offset Voltage	$V_{off}$	$R_g = \text{open}$	-300		+300	mV
Voltage Gain	VG		44	46	48	dB
Total Harmonic Distortion	THD	$P_o = 1\text{W}$		0.08		%
Input Resistance	$r_i$		20	30	40	k $\Omega$
Output Noise Voltage	$V_{NO1}$	$R_g = 0, \text{B.P.F.} = 20\text{Hz to } 20\text{kHz}$		0.2	0.4	mVrms
	$V_{NO2}$	$R_g = 10\text{k}\Omega, \text{B.P.F.} = 20\text{Hz to } 20\text{kHz}$		0.4	0.8	mVrms
Ripple Rejection	$R_r$	$R_g = 0, V_R = 0\text{dBm}, f_R = 100\text{Hz}$	45	55		dB
Standby Current	$I_{st}$	Standby switch OFF		1.0	10	$\mu\text{A}$

## Sample Application Circuit



Note : Connect the tab marked with \* to large-signal GND.

The application circuit diagrams and circuit constants herein are included as an example and provide no guarantee for designing equipment to be mass produced. The information herein is believed to be accurate and reliable. However, no responsibility is assumed by SANYO for its use, nor for any infringements of patents or other rights of third parties which may result from its use.