

**SANYO**

No.2717

**LA4497, 4498**

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

**Features**

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

**Functions**

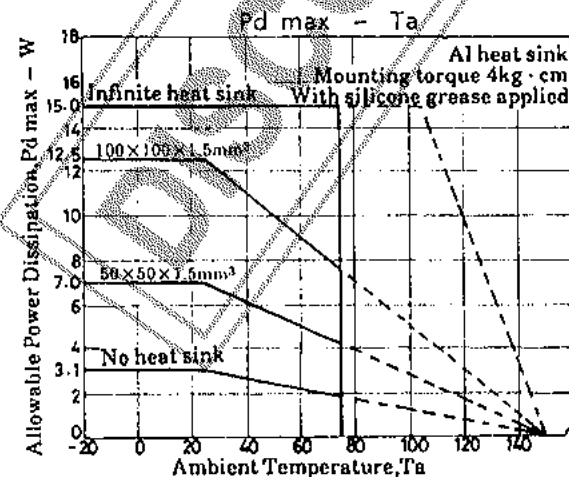
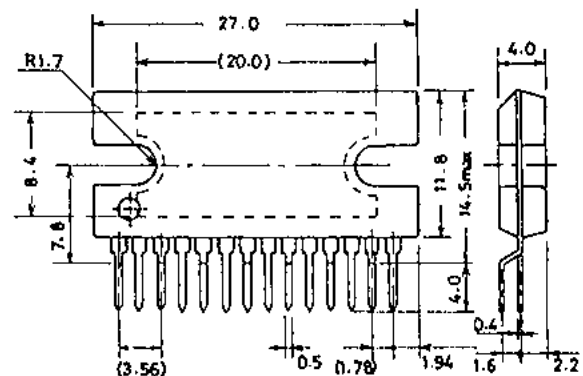
- On-chip standby circuit
- On-chip pop noise preventer (Starting time : 0.6 to 0.8sec.)
- Thermal shutdown circuit
- Overvoltage/surge protector
- On-chip output pin-to-GND short protector (with speaker protection)
- On-chip output pin-to-V<sub>CC</sub> short protector (with speaker protection)
- On-chip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

**SANYO Electric Co., Ltd. Semiconductor Overseas Marketing Div.**  
 Natsume Bldg., 18-6, 2-chome, Yushima, Bunkyo-ku, TOKYO 113 JAPAN

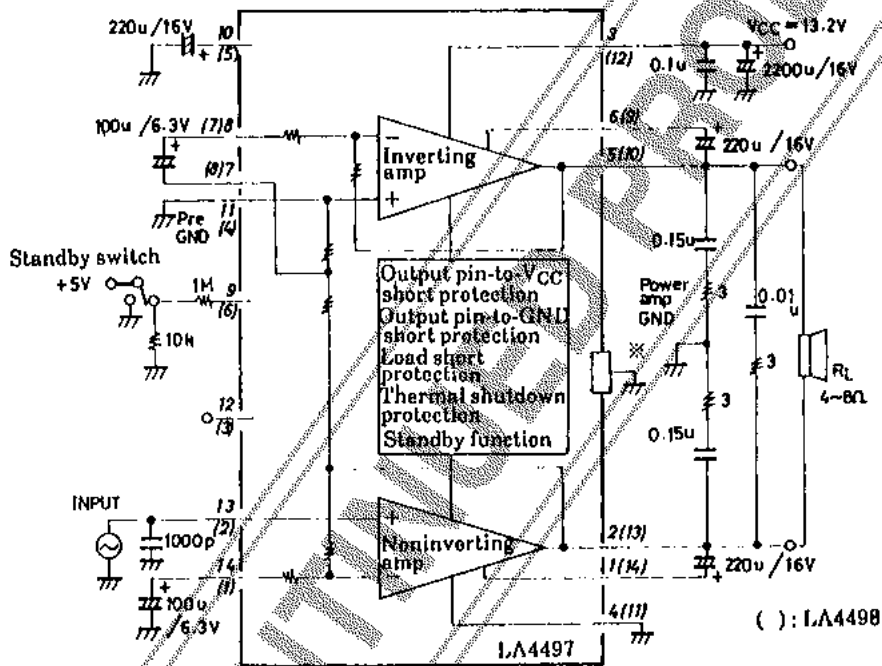
1098TA, TS No.2717-1/2

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	$I_{cc0}$		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.  
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