

### APPLICATIONS

- 5.8W Audio Power Amplifier
- Car Stereo, Car Radio Audio Output

### FEATURES

- Very Few External Parts (Require 4 pcs Capacitor)
- Adjustable Closed-Loop Gain
- High Sustaining Over Voltage  
(Surge voltage up to 40V for 0.2sec. pin 1 to 8)
- Excellent Ripple Rejection
- High Power and Low Distortion:  
 $P_{OUT}=5.8W$  (Typ.) at  $V_{CC}=13.2V$ ,  $R_L=4\Omega$ , THD=10%  
THD=0.2% (Typ.)
- Possible to Use for  $2\Omega$  Load:  
 $P_{OUT}=9.3W$  (Typ.) at  $V_{CC}=13.2V$ , THD=10%
- Operating Supply Voltage Range:  $V_{CC}=8\sim 18V$
- Audio Muting Circuit
- Protection Circuit (for Load Short, Excessive Supply Voltage and Thermal Shut-down)

### ■ MAXIMUM RATINGS ( $T_a=25^\circ C$ )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Supply Voltage (200ms)	$V_{CC\text{ surge}}$	40	V
D. C Supply Voltage	$V_{CC(DC)}$	25	V
Operating Supply Voltage	$V_{CC(OPR)}$	18	V
Output Current (Peak)	$I_{O(PEAK)}$	4.5	A

CHARACTERISTIC	SYMBOL	RATING	UNIT
Power Dissipation ( $T_c=25^\circ C$ )	$P_D$	12.5	W
Operating Temperature	$T_{OPR}$	-30~75	$^\circ C$
Storage Temperature	$T_{STG}$	-55~150	$^\circ C$

### ■ ELECTRICAL CHARACTERISTICS

(Unless otherwise specified,  $V_{CC}=12.5V$ ,  $R_L=4\Omega$ ,  $R_g=600\Omega$ ,  $f=1kHz$ ,  $T_a=25^\circ C$ )

CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Quiescent Current	$I_{CCQ}$	-	-	-	40	80	mA
			$V_{CC}=18V$	-	45	100	
Output Power	$P_{OUT}$	-	THD=10%	-	5.2	-	W
			$V_{CC}=13.2V$ , THD=10%	5.0	5.8	-	
			$V_{CC}=13.2V$ , $R_L=2\Omega$ , THD=10%	-	9.3	-	
Maximum Output Power	$P_{OM}$	-	$V_{CC}=13.2V$ , $V_{IN}=100mV$	-	9.0	-	W
Total Harmonic Distortion	THD	-	$P_{OUT}=1W$	-	0.2	1.5	%
			$P_{OUT}=100mW$	-	0.36	1.0	
			$P_{OUT}=1W$ , $R_L=2\Omega$	-	0.5	-	
Voltage Gain	$G_V$	-	-	51.5	53	54.5	dB
Input Resistance	$R_{IN}$	-	-	-	34	-	k $\Omega$
Output Noise Voltage	$V_{NO}$	-	$R_g=10k\Omega$ , BW=50~20kHz	-	0.9	2.0	mV

Unit in mm

