



**ELECTRONICS, INC.**  
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## NTE1358 Integrated Circuit Module, AF PO, 50W, Dual Power Supply

**Absolute Maximum Ratings:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

Maximum Supply Voltage,  $V_{CCmax}$  .....  $\pm 53\text{V}$   
 Operating Junction Temperature,  $T_J$  .....  $+150^\circ\text{C}$   
 Storage Temperature Range,  $T_{stg}$  .....  $-30^\circ$  to  $+105^\circ\text{C}$   
 Thermal Resistance, Junction-to-Case,  $R_{thJC}$  .....  $1.8^\circ\text{C/W}$   
 Available Time for Load Shorted ( $V_{CC} = \pm 36\text{V}$ ,  $R_L = 8\Omega$ ,  $f = 50\text{Hz}$ ,  $P_O = 50\text{W}$ ),  $t_s$  ..... 2sec

**Recommended Operating Conditions:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

Recommended Supply Voltage,  $V_{CC}$  .....  $\pm 23\text{V}$   
 Load Resistance,  $R_L$  .....  $8\Omega$

**Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$ ,  $V_{CC} = \pm 36\text{V}$ ,  $R_L = 8\Omega$  (Non-Inductive Load),  $R_g = 600\Omega$ ,  $V_G = 26.3\text{dB}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Current	$I_{CCO}$	$V_{CC} = \pm 43\text{V}$	20	40	80	mA
Output Power	$P_O$	THD = 0.02%, $f = 20\text{Hz}$ to $20\text{kHz}$	50	–	–	W
		$V_{CC} = \pm 31\text{V}$ , THD = 0.03%, $f = 1\text{kHz}$ , $R_L = 4\Omega$	55	–	–	W
Total Harmonic Distortion	THD	$P_O = 1$ to $50\text{W}$ , $f = 20\text{Hz}$ to $20\text{kHz}$	–	–	0.02	%
Emitter Resistance	$R_E$		0.18	0.22	0.30	$\Omega$

Note 1. For power supply at the time of test, use a constant-voltage power supply unless otherwise specified.

**Pin Connection Diagram**  
(Front View)

