



EAST/WEST CORRECTION FOR DIGITAL TV-SETS

ADVANCE DATA

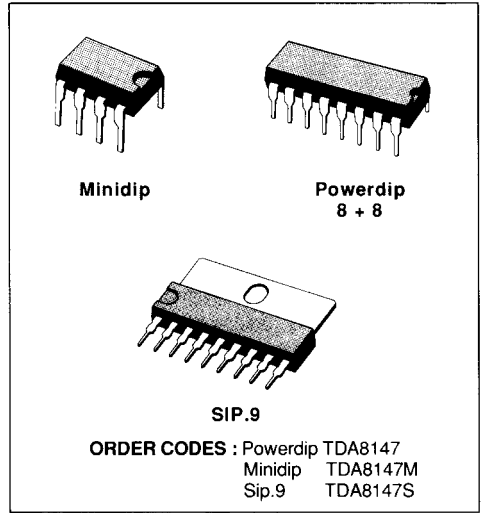
- LOW POWER DISSIPATION
- PULSE WIDTH MODULATOR FOR SWITCH MODE OPERATION
- OUTPUT SINK CURRENT UP TO 800mA
- OUTPUT SOURCE CURRENT UP TO 100mA
- HIGH IMPEDANCE INPUT AMPLIFIER

DESCRIPTION

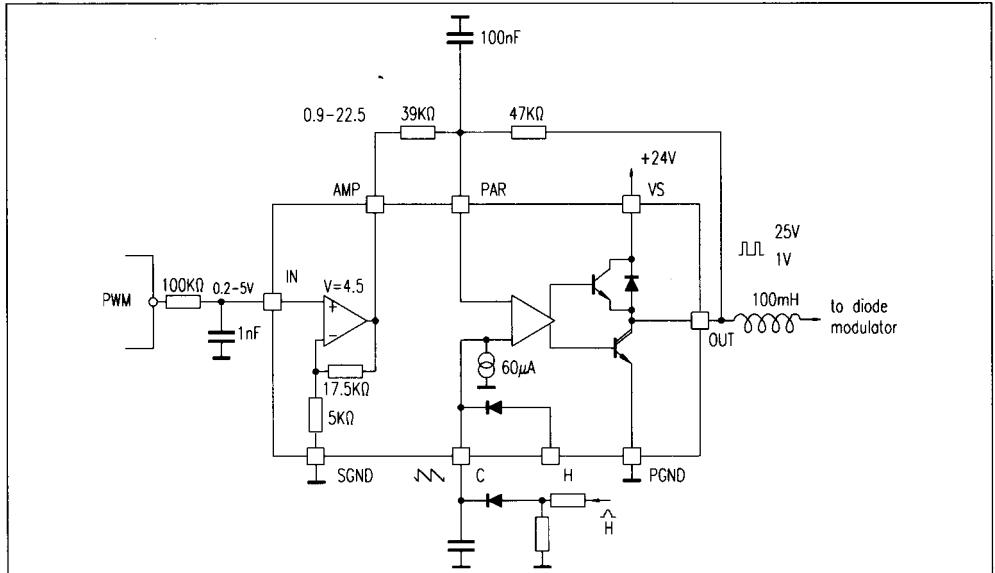
The TDA8147 is a monolithic integrated circuit available in three different packages : minidip, powerdip, SIP.

The TDA8147 is designed for use in the east-west pin-cushion correction by driving a diode modulator in TV application.

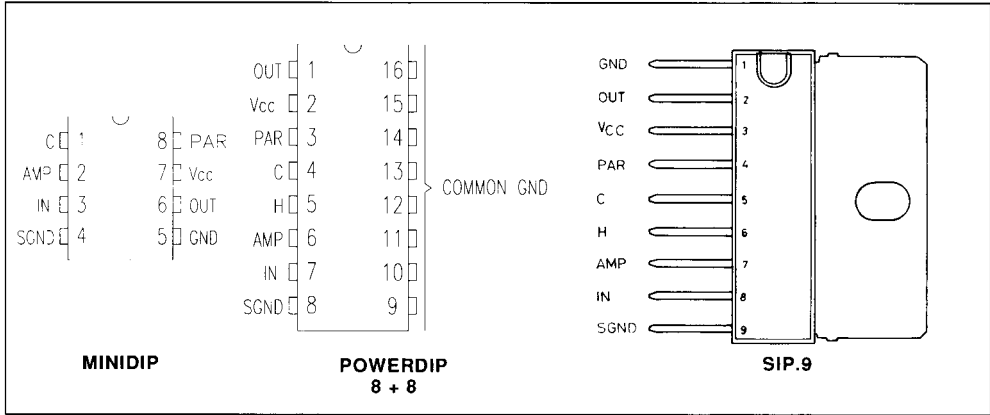
Since this device has not the parabole generator end is driven by a PWM, it is very useful in digital TV-sets.



BLOCK DIAGRAM



PIN CONNECTIONS (top view)



ELECTRICAL CHARACTERISTICS

 $V_S = 24V$, $T_J = 25^\circ C$ (unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
V_S	Supply Voltage		15	24	26	V
I_S	Supply Current	$V_{out} = LOW$		4	7	mA
V_{SATL}	Saturation Voltage	$I_O = 800mA$ Sink		1.2	2	V
V_{DSAT}	Diode Forward Voltage	$I_O = -800mA$		1.1	1.75	V
V_{SATH}	Saturation Voltage	$I_O = 100mA$ Source		0.8	1.25	V
I_C	Current Sink Pin C		40	60	90	μA
I_{IN}	Input Current			0.1		μA
G	Opamp Gain		4.3	4.5	4.7	
V_O	Output Voltage Swing	$I_{out} = \pm 1mA$	0.9		$V_S - 1.5$	V

ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
I_{outL}	Output Sink Current	800	mA
I_{outH}	Output Source Current	100	mA
V_S	Supply Voltage	28	V
V_{IN}	Input Voltages	0.3 to V_S	V
P_{tot}	Power Dissipation at $T_{amb} = 70^\circ C$	0.8 minidip 1.1 powerdip 1.1 SIP9	W
T_{stg} , T_J	Storage and Junction Temperature	- 25 to + 150	$^\circ C$

THERMAL DATA

$R_{th(j-amb)}$		Value	Unit
	Minidip	100	$^\circ C/W$
	Powerdip	70	$^\circ C/W$
	SIP9	70	$^\circ C/W$