



## T78041

## LINEAR INTEGRATED CIRCUIT

### VERTICAL DEFLECTION OUTPUT CIRCUIT

#### DESCRIPTION

The UTC **T78041** is a monolithic integrated IC and designed for high-definition TV and CRT displays in systems that use a bus control system signal-processing IC. It is intended to directly drive the deflection coil. Besides, It offers a maximum deflection current of 2.2A peak to peak to suitable for large diameter CRTs.

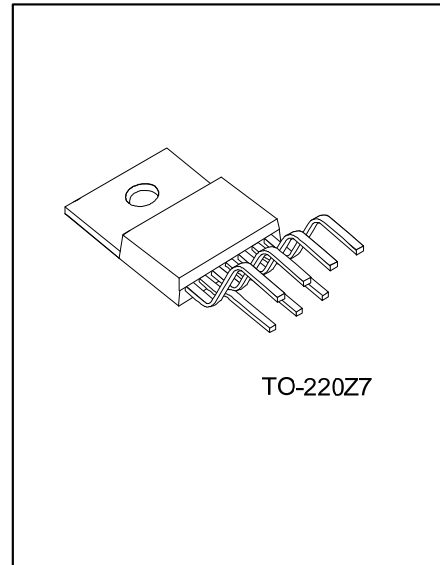
#### FEATURES

- \* Low power operation achieved by using integrated charge pump circuit.
- \* Vertical output circuit.
- \* Thermal protection circuit.
- \* Excellent crossover characteristics.
- \* Supports DC coupling.

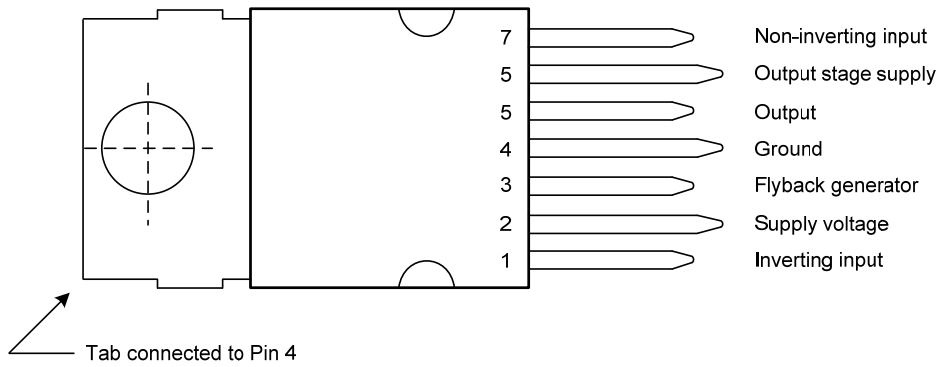
#### ORDERING INFORMATION

Ordering Number		Package	Packing
Lead Free	Halogen Free		
T78041L-TB7-T	T78041G-TB7-T	TO-220Z7	Tube

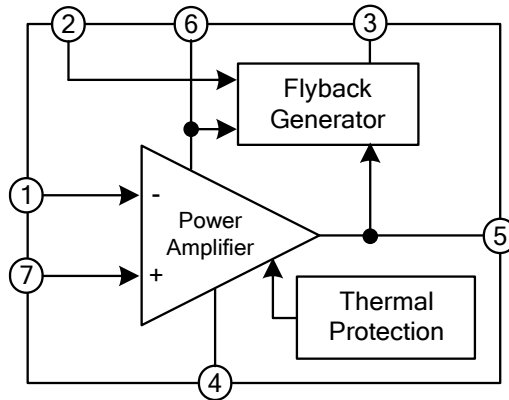
<p>T78041L-TB7-T</p> <p>(1)Packing Type (2)Package Type (3)Lead Free</p>	<p>(1) T: Tube (2) TB7: TO-220Z7 (3) G: Halogen Free, L: Lead Free</p>
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## ■ PIN CONFIGURATIONS



## ■ BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage (pin 2 to Pin4)	$V_{CC2}$	34	V
Output Supply Voltage (pin 6 to Pin4)	$V_{CC6}$	70	V
Output Peak Current	$I_5$	-1.5~1.5	A
Power Dissipation	$P_D$	9	W
Junction Temperature	$T_J$	150	°C
Operating Temperature	$T_{OPR}$	-20~+85	°C
Storage Temperature	$T_{STG}$	-40~+150	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ THERMAL DATA

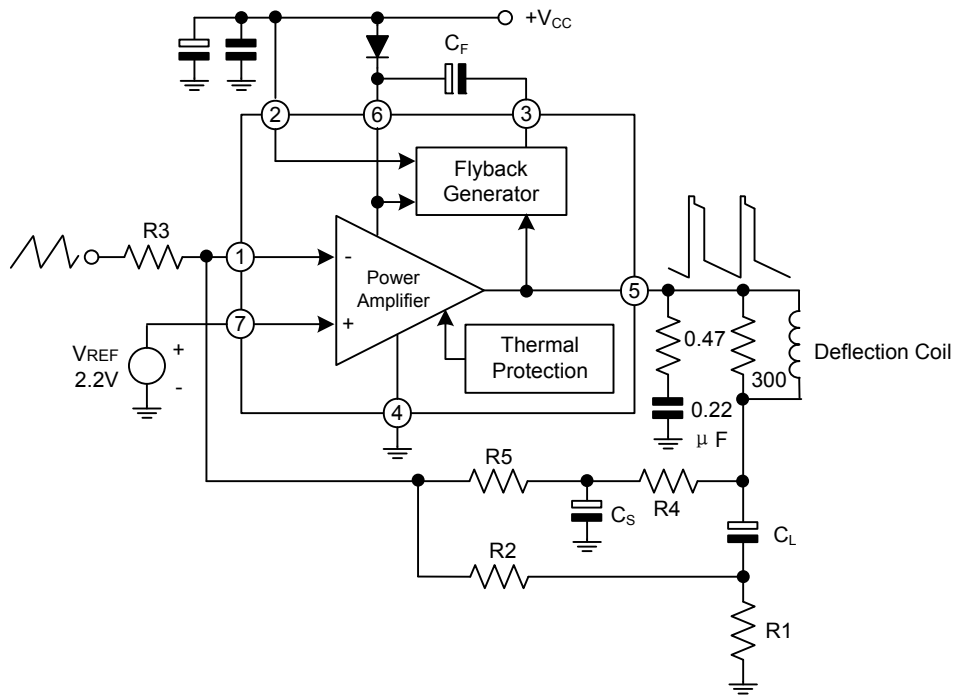
PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Case	$\theta_{JC}$	3.0	°C/W

■ ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$ ,  $V_{CC}=24\text{V}$ , unless otherwise specified)

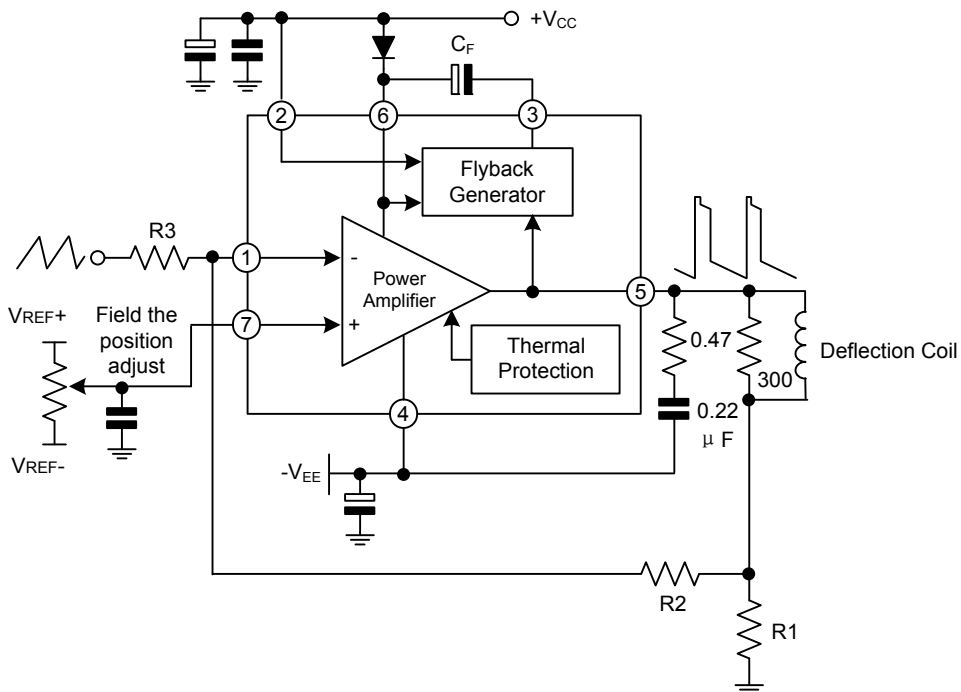
PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Supply Voltage	$V_{CC}$		16	24	33	V
Quiescent Current	$I_Q$		35	-	65	mA
Recommend Biggest Peak to Peak Deflect Current	$I_5$				2.2	A
Output Saturated Voltage to GND	$V_{5L}$	$I_5=1.1\text{A}$			1.5	V
Output Saturated Voltage to Supply	$V_{5H}$	$I_5=-1.1\text{A}$			3.5	V
Pin 3 Saturation Voltage to GND	$V_{3L}$	$I_3=20\text{mA}$			1.8	V
Pin 3 Saturation Voltage to GND (Return to Sweep the Second Part)	$V_{3(2)}$	$I_3=-1.1\text{A}$			3.2	V
Output Middle Point Voltage	$V_{O(MID)}$		11	12	13	V
Thermal Shutdown Temperature				150		°C

## APPLICATION CIRCUIT

### AC APPLICATION (Single Power Supply)



### DC APPLICATION (Double Power Supply)



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