



## T78040

## LINEAR INTEGRATED CIRCUIT

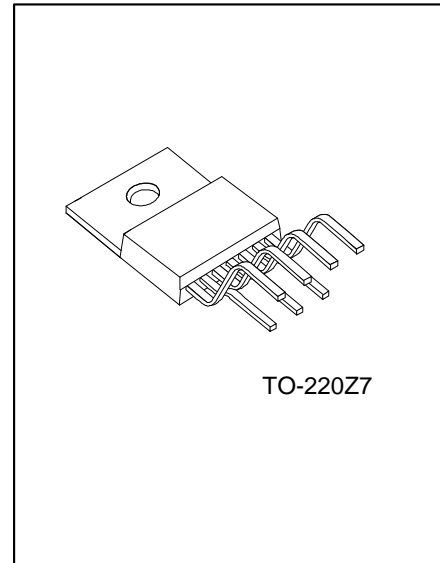
### VERTICAL DEFLECTION OUTPUT CIRCUIT

#### DESCRIPTION

The UTC **T78040** is a monolithic integrated circuit and designed for use in high-definition TV and CRT monitors. It is intended to directly drive the deflection coil. Besides, the T78040 offers a maximum deflection current of 1.8A peak to peak to suitable for small to medium diameter CRTs.

#### FEATURES

- \* Deflection current can be 1.8A peak value
- \* Deflection voltage up to 70V
- \* Flyback generator
- \* Thermal protection circuit
- \* Low cross-over distortion
- \* Supports DC Coupling



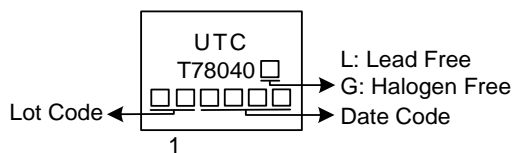
TO-220Z7

#### ORDERING INFORMATION

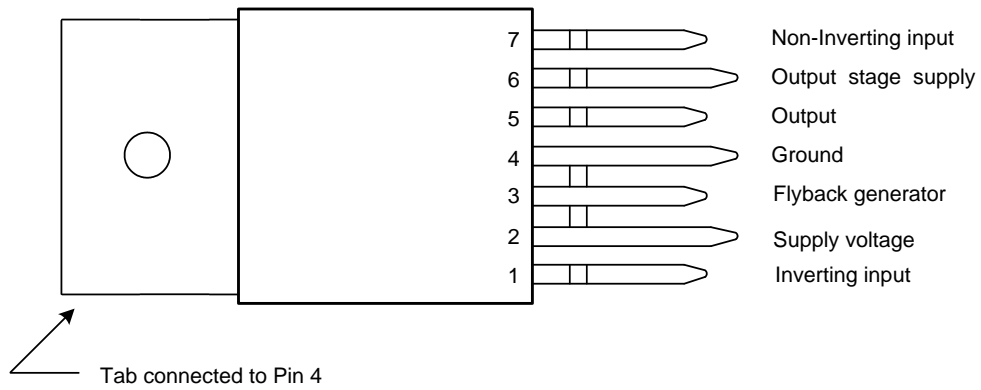
Ordering Number		Package	Packing
Lead Free	Halogen Free		
T78040L-TB7-T	T78040G-TB7-T	TO-220Z7	Tube

<p>T78040G-TB7-T</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) T: Tube (2) TB7: TO-220Z7 (3) G: Halogen Free and Lead Free, L: Lead Free</p>
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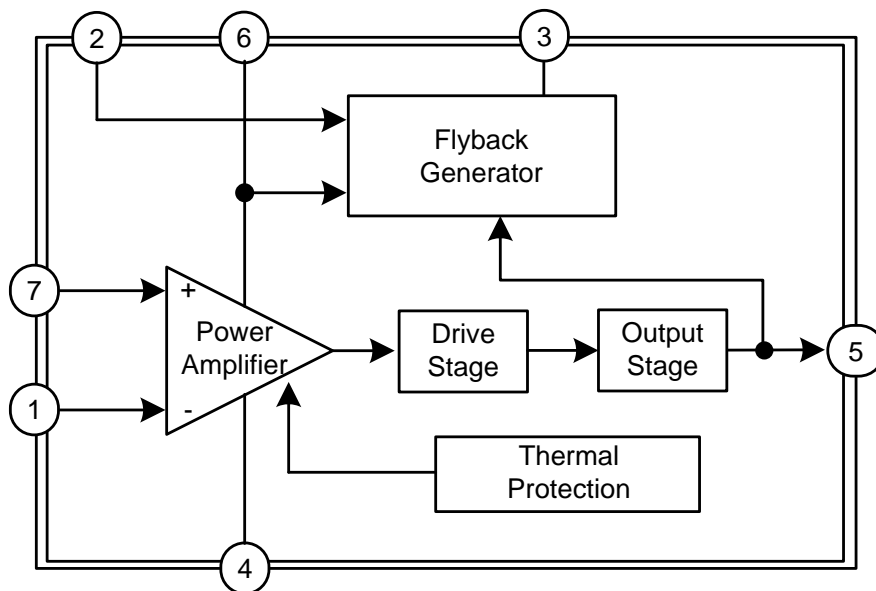
#### MARKING



## ■ PIN CONFIGURATIONS



## ■ BLOCK DIAGRAM



■ **ABSOLUTE MAXIMUM RATINGS** ( $T_A = 25^\circ\text{C}$ , unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage (pin 2 to Pin4)	$V_{CC2}$	34	V
Output Peak Power Supply Voltage (Pin 5 to Pin 4)	$V_{CC6}$	70	V
Output Peak Current	$I_{5MAX}$	-1.5 ~ +1.5	A
Power Dissipation	$P_D$	9	W
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Operating Temperature	$T_{OPR}$	-20 ~ +85	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-40 ~ +150	$^\circ\text{C}$

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**

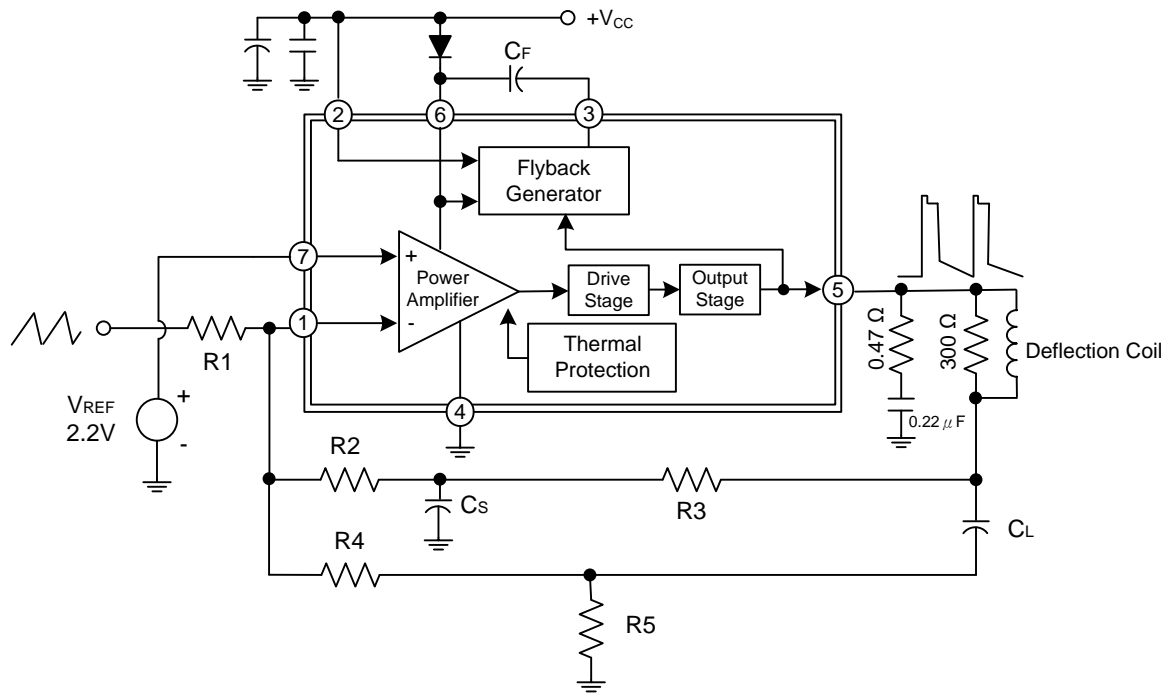
PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Case	$\theta_{JC}$	4.0	$^\circ\text{C/W}$

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

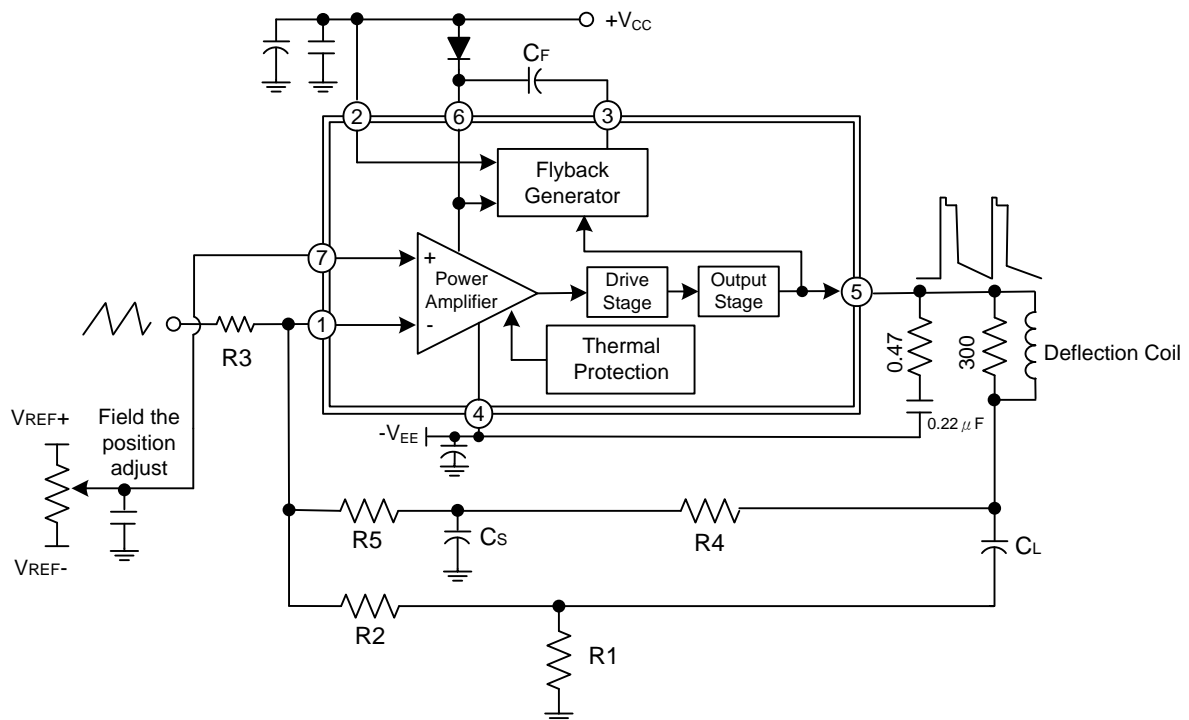
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Supply Voltage	$V_{CC}$		16	24	33	V
Output Saturated Voltage to GND	$V_{S5-4}$	$I_5 = 0.9\text{A}$			1.3	V
Output Saturated Voltage to Supply	$V_{S5-6}$	$I_5 = -0.9\text{A}$			3.2	V
Saturation Voltage on Pin 3	$V_{S3-4}$	$I_3 = 20\text{mA}$			1.8	V
Saturation Voltage to Pin 3 (2nd part of flyback)	$V_{S3-2}$	$I_3 = -0.9\text{A}$			3.0	V
Output Middle Point Voltage	$V_{O(MID)}$		11	12	13	V
Quiescent Current	$I_Q$		20		45	mA
Recommend Biggest Deflect Current	$I_{5P-P}$				1.8	A

## APPLICATION CIRCUITS

For AC Coupling (Single Power Supply)



For DC Coupling (Dual Power Supply)



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