# UTC UNISONIC TECHNOLOGIES CO., LTD

### T78040

#### LINEAR INTEGRATED CIRCUIT

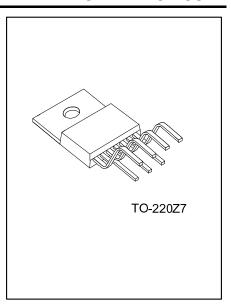
## **VERTICAL DEFLECTION OUTPUT CIRCUIT**

#### **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.

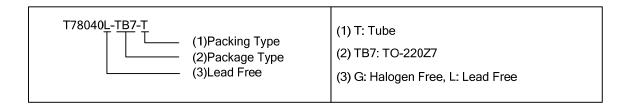
#### **FEATURES**

- \* 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



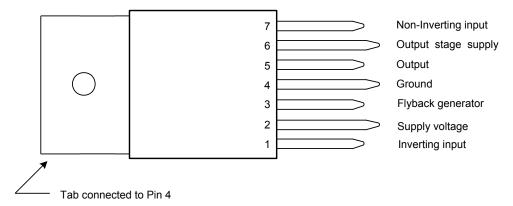
#### **ORDERING INFORMATION**

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

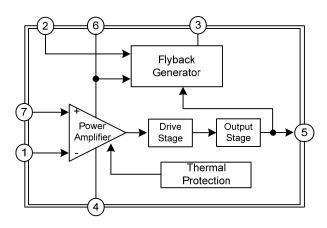


www.unisonic.com.tw 1 of 5 QW-R121-013.C

#### **■ PIN CONFIGURATIONS**



#### **■ BLOCK DIAGRAM**



#### ■ ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>= 25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage (pin 2 to Pin4)	V <sub>CC</sub> 2	34	V
Output Peak Power Supply Voltage (Pin 5 to Pin 4)	V <sub>CC</sub> 6	70	V
Output Peak Current	nt I <sub>5MAX</sub> -1.5 ~ +1.5		Α
Power Dissipation	$P_D$	9	W
Junction Temperature	$T_J$	150	$^{\circ}\!\mathbb{C}$
Operating Temperature	$T_OPR$	-20 ~ +85	$^{\circ}\mathbb{C}$
Storage Temperature	$T_{STG}$	-40 ~ +150	$^{\circ}\mathbb{C}$

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.

#### **■ THERAML DATA**

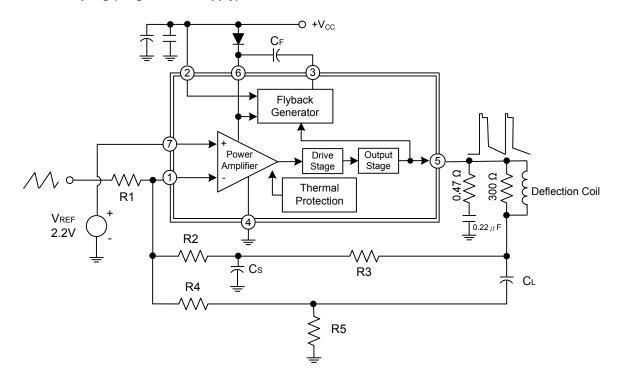
PARAMETER	SYMBOL	RATINGS	UNIT	
Junction to Case	$\theta_{JC}$	4.0	°C/W	

#### ■ ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C, V<sub>CC</sub> = 24V, unless otherwise specified)

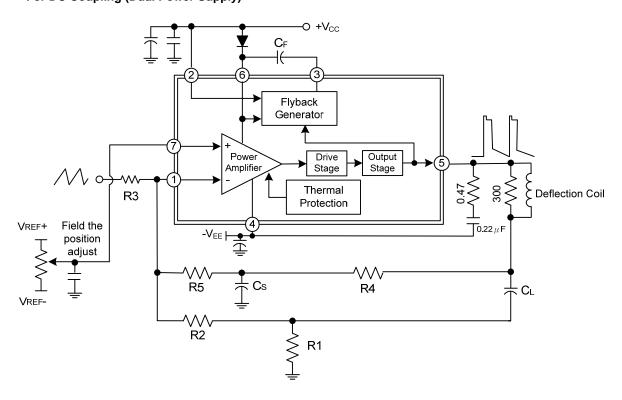
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Supply Voltage	$V_{CC}$		16	24	33	V
Output Saturated Voltage to GND	$V_{S5-4}$	I <sub>5</sub> =0.9A			1.3	V
Output Saturated Voltage to Supply	V <sub>S5-6</sub>	I <sub>5</sub> =-0.9A			3.2	V
Saturation Voltage on Pin 3	V <sub>S3-4</sub>	I <sub>3</sub> = 20mA			1.8	V
Saturation Voltage to Pin 3 (2nd part of flyback)	V <sub>S3-2</sub>	$I_3 = -0.9A$			3.0	V
Output Middle Point Voltage	$V_{O(MID)}$		11	12	13	V
Quiescent Current	ΙQ		35		65	mA
Recommend Biggest Deflect Current	15 <sub>P-P</sub>				1.8	Α

#### APPLICATION CIRCUITS

#### For AC Coupling (Single Power Supply)



#### For DC Coupling (Dual Power Supply)



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