# UNISONIC TECHNOLOGIES CO., LTD

### T78041

#### LINEAR INTEGRATED CIRCUIT

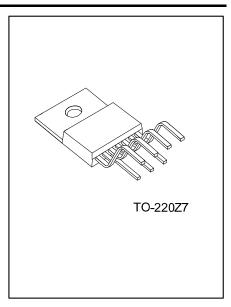
## **VERTICAL DEFLECTION OUTPUT CIRCUIT**

#### **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.

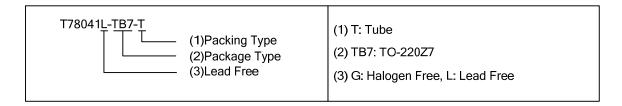
#### **FEATURES**

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



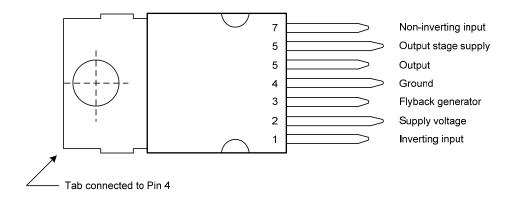
#### **ORDERING INFORMATION**

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

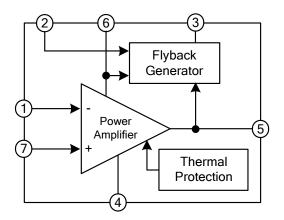


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#### **■ PIN CONFIGURATIONS**



#### **■ BLOCK DIAGRAM**



#### ■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage (pin 2 to Pin4)	V <sub>CC</sub> 2	34	V
Output Supply Voltage (pin 6 to Pin4)	V <sub>CC</sub> 6	70	V
Output Peak Current	l <sub>5</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 <sub>STG</sub>	-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**

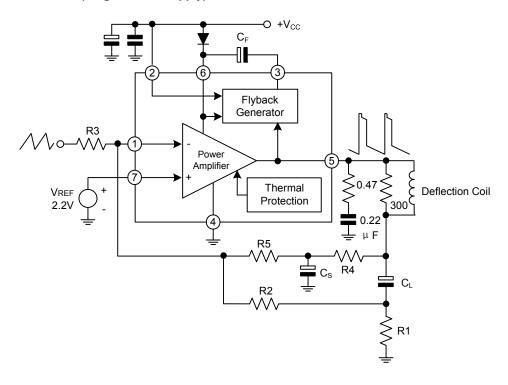
PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Case	$\theta_{JC}$	3.0	°C/W

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

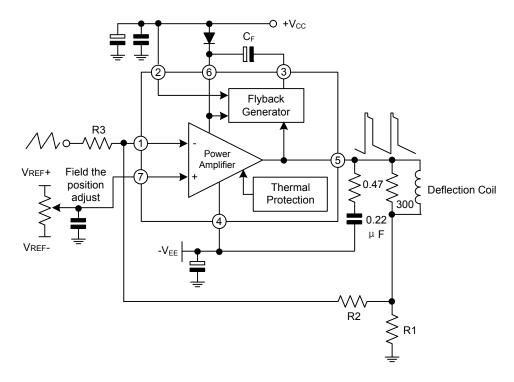
PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Supply Voltage	$V_{CC}$		16	24	33	V
Quiescent Current	ΙQ		35	-	65	mA
Recommend Biggest Peak to Peak Deflect Current	l <sub>5</sub>				2.2	Α
Output Saturated Voltage to GND	$V_{5L}$	I <sub>5</sub> =1.1A			1.5	V
Output Saturated Voltage to Supply	$V_{5H}$	I <sub>5</sub> =-1.1A			3.5	V
Pin 3 Saturation Voltage to GND	$V_{3L}$	I <sub>3</sub> =20mA			1.8	V
Pin 3 Saturation Voltage to GND (Return to Sweep the Second Part)	V <sub>3(2)</sub>	I <sub>3</sub> =-1.1A			3.2	٧
Output Middle Point Voltage	Vo(MID)		11	12	13	V
Thermal Shutdown Temperature				150		$^{\circ}\mathbb{C}$

#### ■ APPLICATION CIRCUIT

#### **AC APPLICATION (Single Power Supply)**



#### **DC APPLICATION (Double Power Supply)**



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