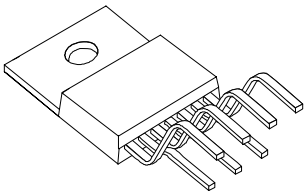
VERTICAL DEFLECTION OUTPUT CIRCUIT



TO-220Z7

*Pb-free plating product number: T78041L

■ DESCRIPTION

The UTC **T78041** 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 T78041 offers a maximum deflection current of 2.2A peak to peak to suitable for large diameter CRTs.

■ FEATURES

* Deflection current can be 2.2A peak value
* Deflection voltage up to 70V
* Flyback Generator
* Thermal Protection Circuit
* Low cross-over distortion
* Supports DC Coupling

■ APPLICATIONS

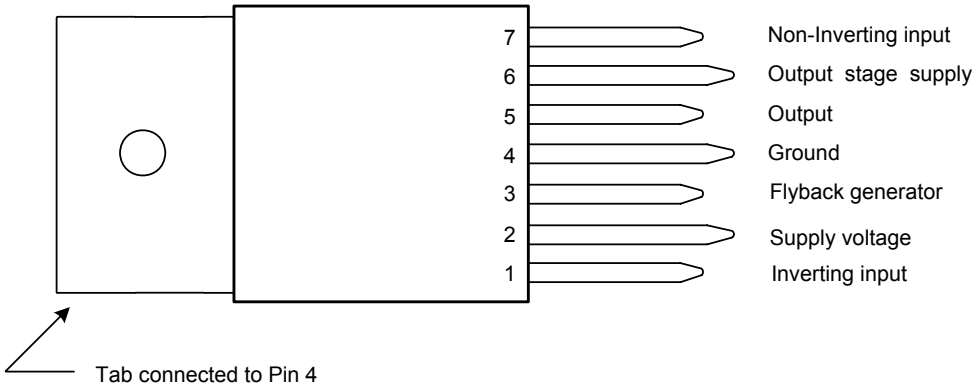
* Vertical deflection for monitors and TVs

■ ORDERING INFORMATION

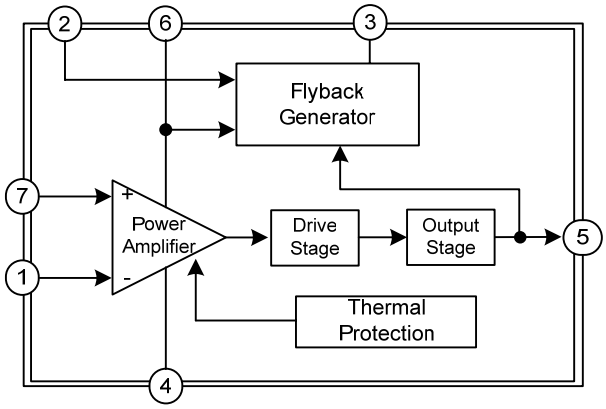
Order Number		Package	Packing
Normal	Lead Free Plating		
T78041-TB7-T	T78041L-TB7-T	TO-220Z7	Tube

T78041L-TB7-T (1)Packing Type (2)Package Type (3)Lead Plating	(1) T: Tube (2) TB7: TO-220Z7 (3) Lead Free Plating, Blank: Pb/Sn

■ PIN CONFIGURATIONS



■ BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage (pin 2 to Pin4)	Vcc2	34	V
Output Supply Voltage (pin 6 to Pin4)	Vcc6	70	V
Output Peak Current	I_{5MAX}	-1.5 ~ +1.5	A
Power Dissipation	P_D	9	W
Junction Temperature	T_J	150	℃
Operating Temperature	T_{OPR}	-20 ~ +85	℃
Storage Temperature	T_{STG}	-40 ~ +150	℃

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

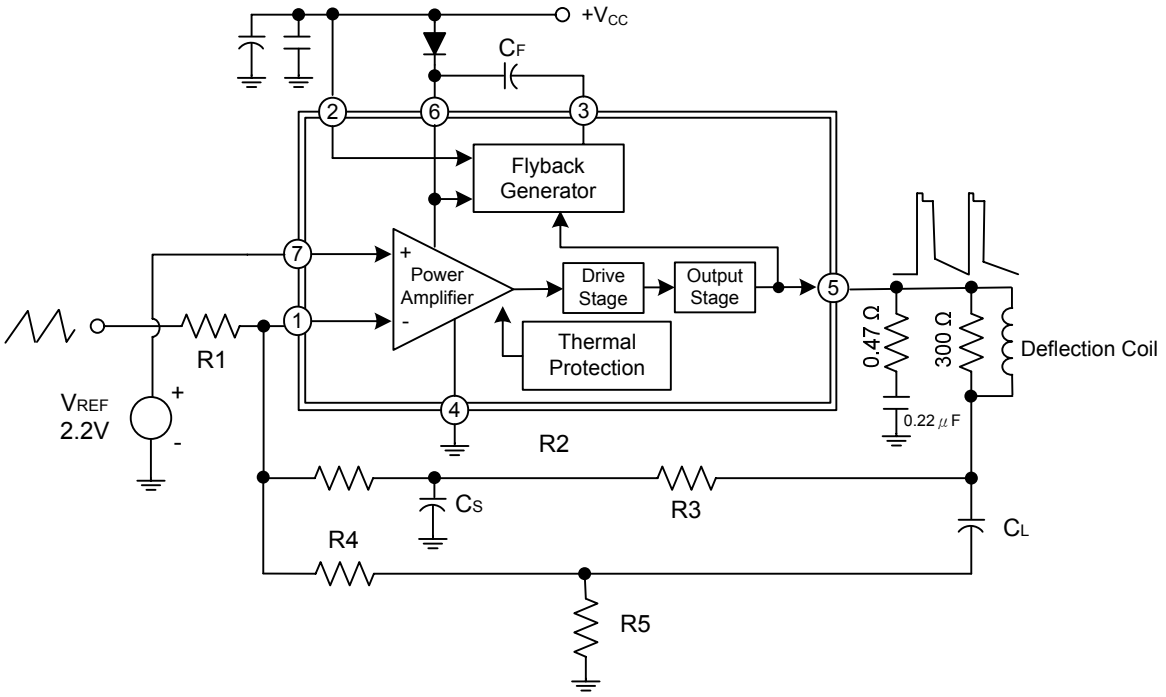
PARAMETER	SYMBOL	RATINGS	UNIT
Thermal Resistance Junction-Case	θ_{JC}	3.0	°C/W

■ ELECTRICAL CHARACTERISTICS (Ta=25℃, Vcc=24V, 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 Deflect Current	I_{5P-P}				2.2	A
Output Saturated Voltage to GND	V_{5L}	I_5=1.1A			1.5	V
Output Saturated Voltage to Supply	V_{5H}	I_5=-1.1A			3.5	V
Pin 3 Saturation Voltage to GND	V_{3L}	I_3=20mA			1.8	V
Pin 3 Saturation Voltage to GND (Return to Sweep the Second Part)	$V_{3(2)}$	I_3=-1.1A			3.2	V
Output Middle Point Voltage	$V_{O(MID)}$		11	12	13	V
Thermal Shutdown Temperature				140		℃

■ APPLICATION CIRCUIT

For AC Coupling (Single Power Supply)



For DC Coupling (Dual Power Supply)