

TV East/West Correction Circuit for Square Tubes

Technology: Bipolar

Features

- Low dissipation
- Square generator for parabolic current specially designed for square C.R.T. correction
- External keystone adjustment (symmetry of the parabola)
- Input for dynamic field correction (beam current change)
- Static picture width adjustment
- Pulse-width modulator
- Final stage D-class with energy redelivery
- Parasitic parabola suppression, during flyback time of the vertical sawtooth

Case: 8 pin dual inline plastic

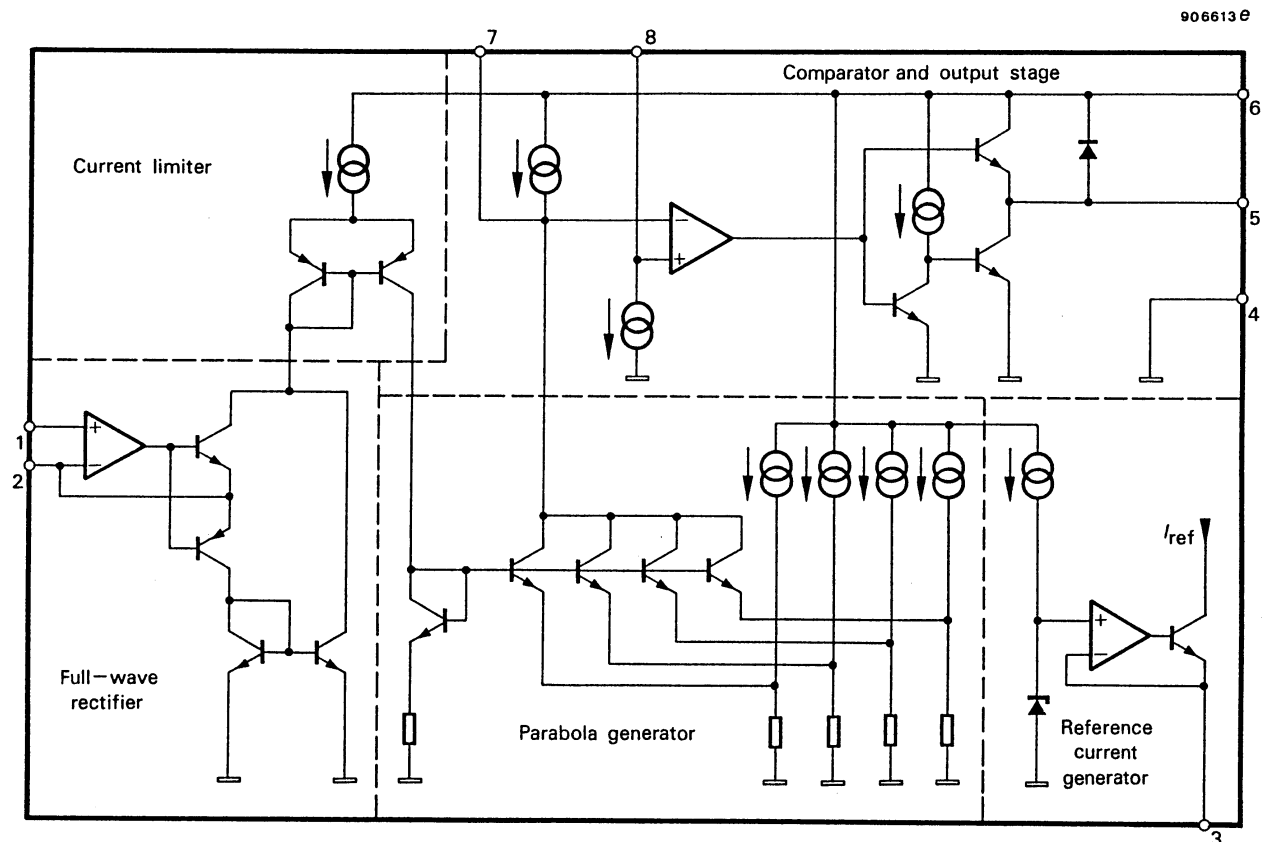


Figure 1. Block diagram

Absolute Maximum Ratings

Parameters	Symbol	Value	Unit	
Supply voltage	Pin 6	V_S	35	V
Supply current	Pin 6	I_S	500	mA
Power dissipation $T_{case} = 50^\circ\text{C}$		P_{tot}	500	mW
Storage temperature range		T_{stg}	-25 to 150	$^\circ\text{C}$
Junction temperature		T_j	-25 to 150	$^\circ\text{C}$

Electrical Characteristics

$V_S = 26\text{ V}$, $T_{amb} = 25^\circ\text{C}$, Test circuits 1 to 5

Parameters	Test Conditions / Pins	Symbol	Min.	Typ.	Max.	Unit
Supply voltage	Pin 6	V_S	17	24	30	V
Supply current	Test circuit 1 Pin 6	I_S		4.5	7	mA
Reference voltage	Test circuit 1 Pin 3	V_{ref}	7.6	8.0	8.8	V
Voltage at Pin 7 *	Test circuit figure 2, Pin 7 $I_{fr} = 0\ \mu\text{A}$ $I_{fr} = 30\ \mu\text{A}$	V_{7A} V_{7C}	15.3	16.0 15.0	16.7	V
Parabola coefficient	$K_1 = \frac{V_{7A} - V_{7B}}{V_{7A} - V_{7C}}$ $K_2 = \frac{V_{7A} - V_{7C}}{V_{7A} - V_{7D}}$			26		%
				70		%
Difference, figure 2	$V_{DE7} = V_{7E} - V_{7F}$		-40	0	40	mV
Current source	Test circuit 3 Pin 8	I_g		100		μA
Saturation voltage	$I_5 = 400\text{ mA}$, Test circuit 4 Pin 5	V_{satL}		1	2	V
	$I_5 = -100\text{ mA}$, Test circuit 5 Pin 5	V_{satH}		0.8	1.5	V
Forward voltage	$I_5 = 400\text{ mA}$, Test circuit 5 Pin 5	V_F		1.2	1.7	V

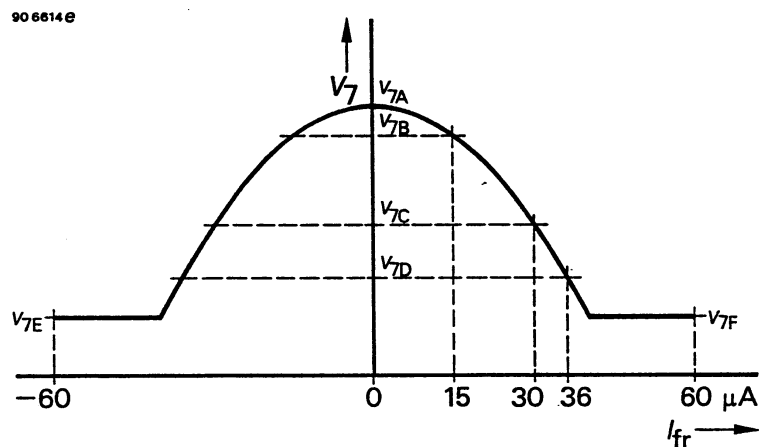


Figure 2. Parabola coefficients

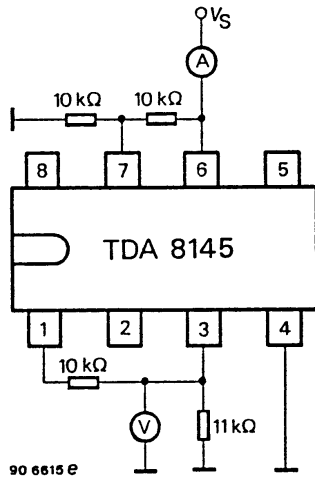


Figure 3. Test circuit 1

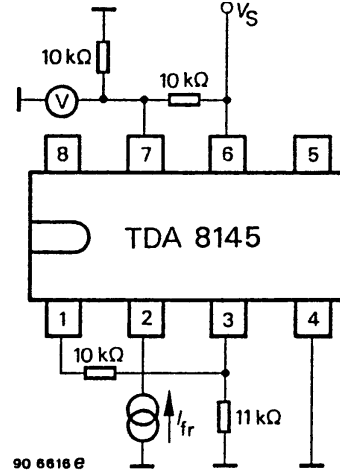


Figure 4. Test circuit 2

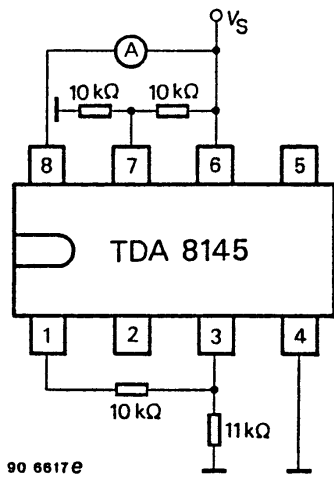


Figure 5. Test circuit 3

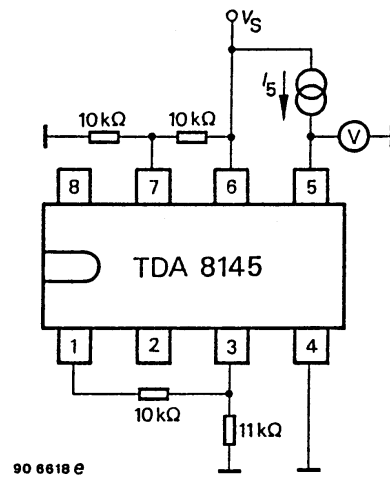


Figure 6. Test circuit 4

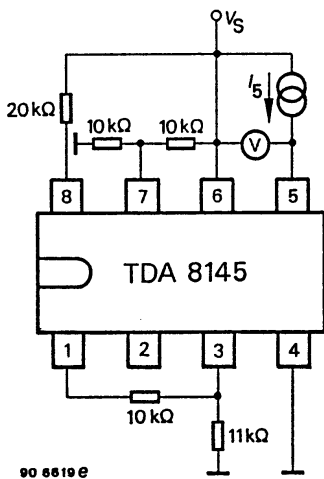


Figure 7. Test circuit 5

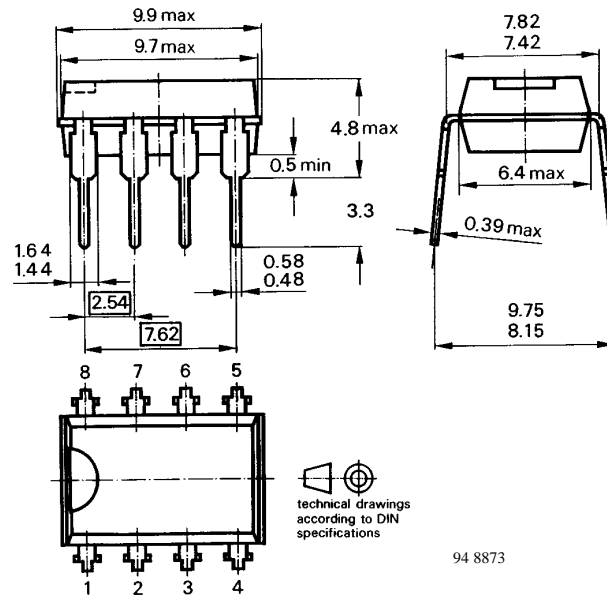
TDA8145

TEMIC

TELEFUNKEN Semiconductors

Dimensions in mm

Package: DIP 8



We reserve the right to make changes to improve technical design and may do so without further notice.

Parameters can vary in different applications. All operating parameters must be validated for each customer application by the customer. Should the buyer use TEMIC products for any unintended or unauthorized application, the buyer shall indemnify TEMIC against all claims, costs, damages, and expenses, arising out of, directly or indirectly, any claim of personal damage, injury or death associated with such unintended or unauthorized use.

TEMIC TELEFUNKEN microelectronic GmbH, P.O.B. 3535, D-74025 Heilbronn, Germany
Telephone: 49 (0)7131 67 2831, Fax number: 49 (0)7131 67 2423