

Silicon NPN Transistor

BU108

750V / 5A

DATASHEET

OEM – Telefunken

Source: Telefunken Databook 1972/73

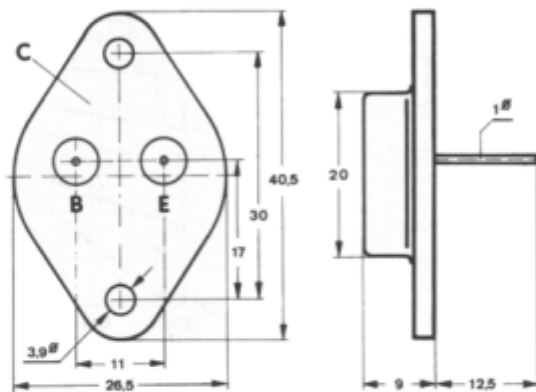
BU 108**Silizium-NPN-Leistungstransistor mit hoher Sperrspannung für Horizontal-Ablenk-Endstufen in Farbfernsehempfängern.**

Silicon NPN power transistor with high reverse voltage for horizontal deflection output circuits in colour TV receivers.

Abmessungen · Dimensions

Maße in mm

M 1:1



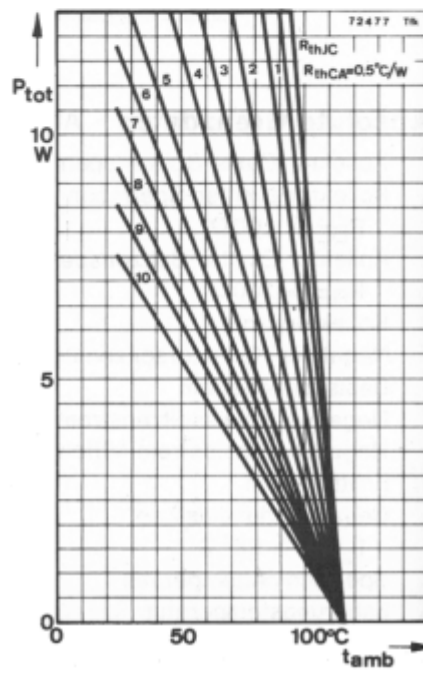
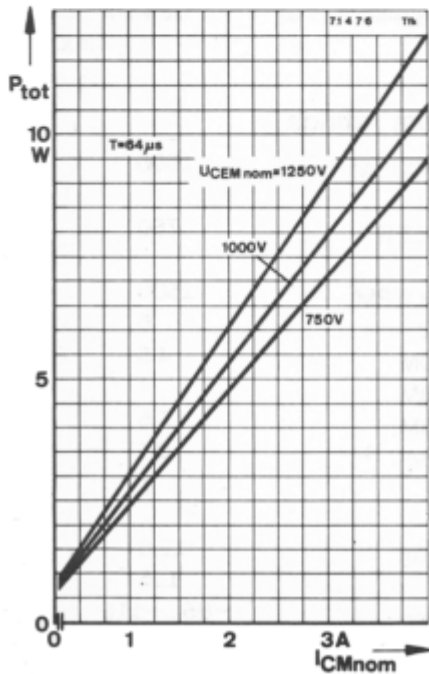
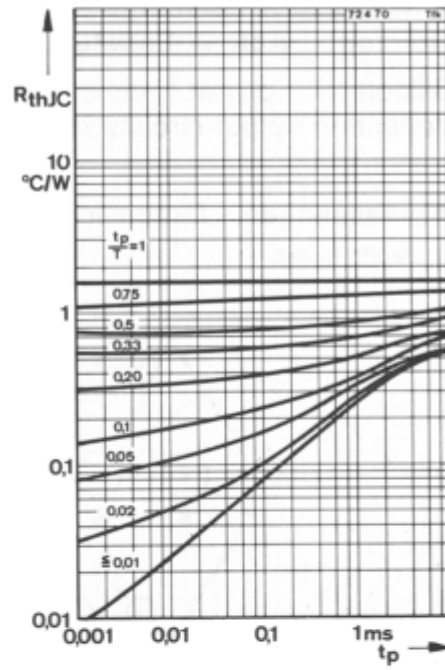
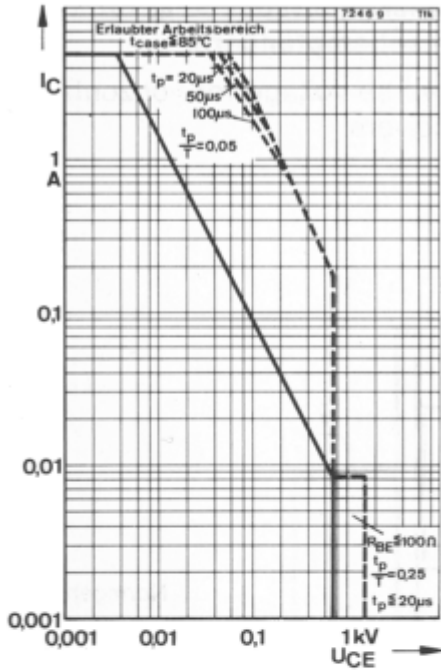
Normgehäuse
DIN 3 B 2
JEDEC TO 3
Gewicht · Weight
max. 20 g

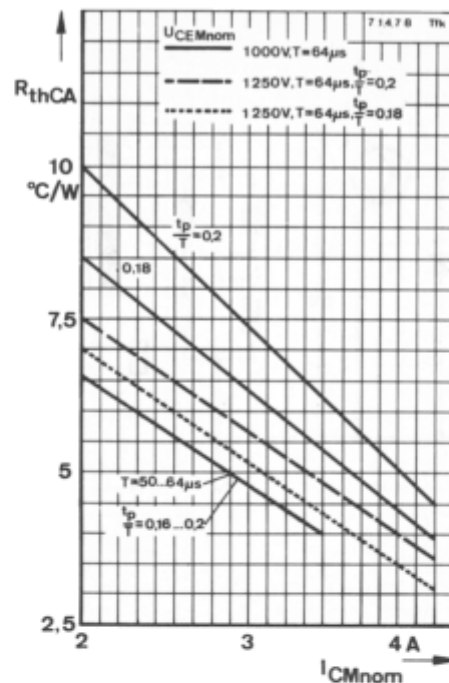
Absolute Grenzdaten · Absolute maximum ratings

Kollektor-Basis-Spitzensperrspannung	U_{CBOM}	1500	V
Kollektor-Emitter-Sperrspannung $R_{BE} \leq 100 \Omega$	U_{CER}	750	V
Kollektor-Emitter-Spitzensperrspannung $R_{BE} \leq 100 \Omega$	U_{CERM}	1500	V
Kollektorstrom	I_C	5	A
Negativer Kollektorspitzenstrom	$-I_{CM}$	4,5	A
Basisspitzenstrom	I_{BM}	4	A
Negativer Basisspitzenstrom	$-I_{BM}$	2,5	A
Negativer Basisstrom Mittelwert	$-I_{BAV}^{1)}$	0,1	A
Emitterstrom	$-I_E$	7	A
Gesamtverlustleistung $t_{case} \leq 95^\circ C$	P_{tot}	12,5	W
Sperrschichttemperatur	t_j	115	$^\circ C$
Lagerungstemperatur	t_{stg}	-65...+115	$^\circ C$

¹⁾ $t_{av} \leq 20 ms$

BU 108



BU 108**Wärmewiderstand · Thermal resistance**

Sperrschicht-Gehäuse

 R_{thJC}

Min.

Typ.

Max.

1,6 °C/W

Kenngrößen · CharacteristicsUmgebungstemperatur $t_{amb} = 25^{\circ}C$

Kollektor-Emitter-Durchbruchspannung

 $I_C = 7,5 \text{ mA}, R_{BE} = 100 \Omega$ $U_{(BR)CERM}^{1)}$ 1500

V

Emitter-Basis-Durchbruchspannung

 $I_E = 100 \text{ mA}$ $U_{(BR)EBO}$ 5

V

Kollektor-Sättigungsspannung

 $I_C = 4,5 \text{ A}, I_B = 2 \text{ A}$ $U_{CEsat}^{1)}$

5

V

Basis-Sättigungsspannung

 $I_C = 4,5 \text{ A}, I_B = 2 \text{ A}$ $U_{BEsat}^{1)}$

1,5

V

Transitfrequenz

 $U_{CE} = 5 \text{ V}, I_C = 100 \text{ mA}, f = 5 \text{ MHz}$ f_T

7

MHz

Kollektor-Basis-Kapazität

 $U_{CB} = 10 \text{ V}, f = 1 \text{ MHz}$ C_{CBO}

125

pF

Abfallzeit

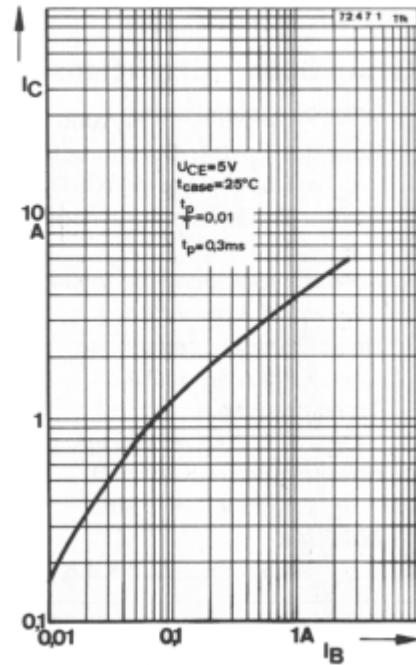
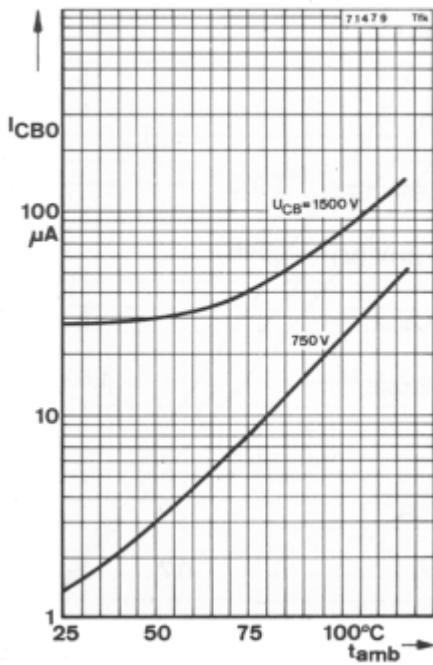
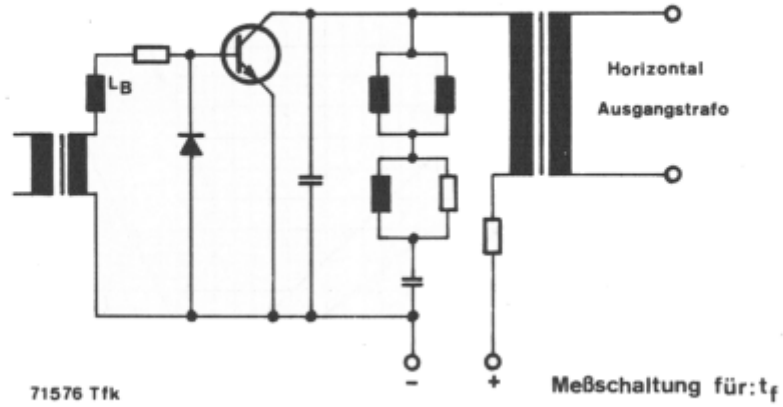
 $I_C = 4,5 \text{ A}, I_B = 1,8 \text{ A}, L_B = 10 \mu\text{H}$ $t_f^{2)}$

0,7

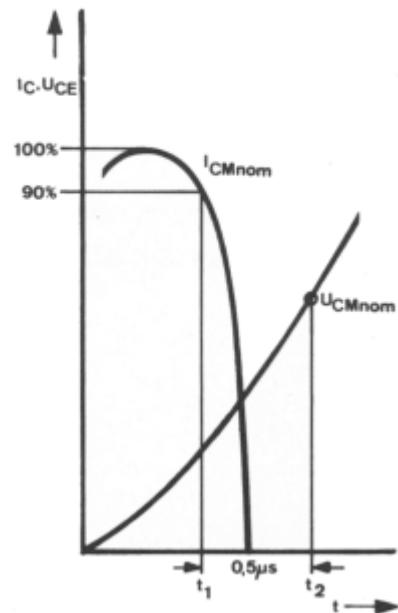
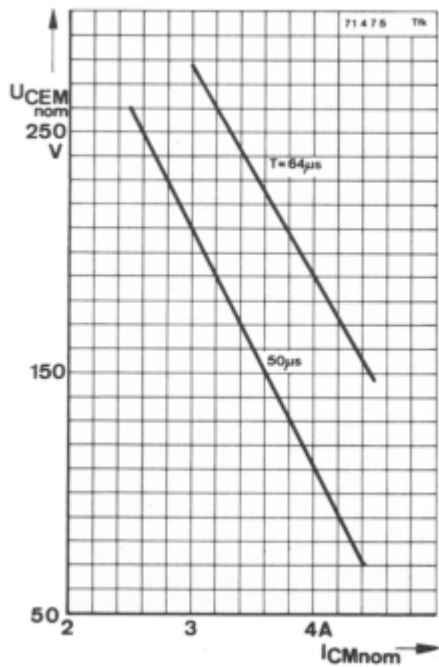
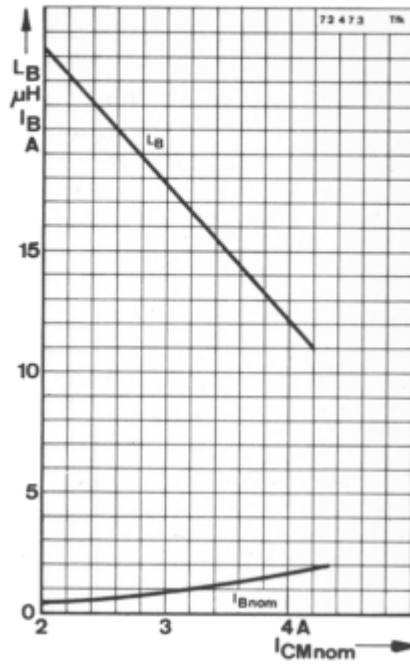
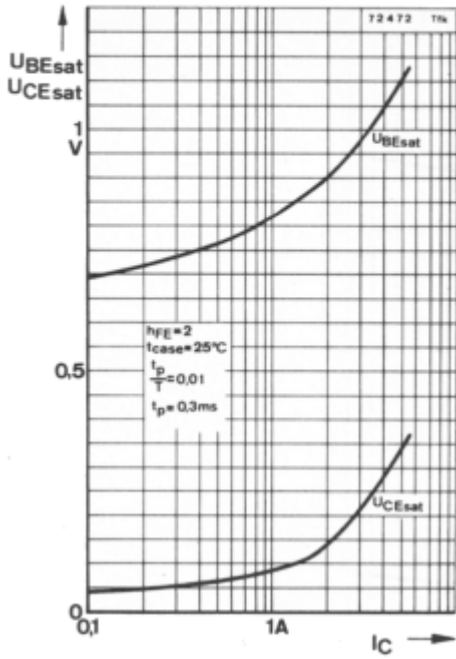
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 μs 1) $\frac{t_p}{T} = 0,01, t_p = 0,3 \text{ ms}$ 2) siehe Meßschaltung
see test circuit

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