

**NPN Silicon Power Transistor**

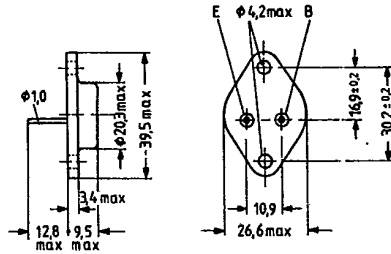
**BU 626 A**

SIEMENS AKTIENGESELLSCHAFT

DT-33-13

BU 626 A is a triple diffused silicon NPN power switching transistor in TO 3 case (3 B 2 DIN 41872). It is outstanding for short switching times and high dielectric strength and is particularly suitable for use in power supply units of TV receivers. The collector is electrically connected to the case.

Type	Ordering code
BU 626 A	Q68000-A4984



Approx. weight 18 g

Dimensions in mm

**Maximum ratings**

Collector-base voltage	$V_{CBS}$	1000	V
Collector-emitter voltage	$V_{CEO}$	400	V
Emitter-base voltage	$V_{EBO}$	7	V
Collector current	$I_C$	10	A
Collector-peak current	$I_{CM}$	15	A
Junction temperature	$T_j$	175	°C
Storage temperature range	$T_{stg}$	-65 to +175	°C
Total power dissipation ( $T_{case} \leq 25^\circ\text{C}; V_{CE} = 20\text{ V}$ )	$P_{tot}$	100	W

**Thermal resistance**

Junction to case	$R_{thJC}$	$\leq 1.5$	K/W
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**Static characteristics** ( $T_{\text{case}} = 25^\circ\text{C}$ )

Collector-emitter breakdown voltage ( $I_{\text{CEO}} = 50\text{ mA}$ ; pulse load = $200\ \mu\text{s}$ )	$V_{(\text{BR})\text{CEO}}$	> 400	V
Emitter-base-breakdown voltage ( $I_{\text{EBO}} = 10\text{ mA}$ )	$V_{(\text{BR})\text{EBO}}$	> 7	V
Collector cutoff current ( $V_{\text{CE}} = 1000\text{ V}$ )	$-I_{\text{CES}}$	< 1	mA
Base-emitter saturation voltage ( $I_{\text{C}} = 8\text{ A}$ ; $I_{\text{B}} = 2.5\text{ A}$ )	$V_{\text{BEsat}}$	< 2.2	V
Collector-emitter saturation voltage ( $I_{\text{C}} = 8\text{ A}$ ; $I_{\text{B}} = 2.5\text{ A}$ )	$V_{\text{CEsat}}$	< 3.3	V
DC current gain ( $I_{\text{C}} = 10\text{ A}$ ; $V_{\text{CE}} = 1.5\text{ V}$ )	$h_{\text{FE}}$	> 10	-
( $I_{\text{C}} = 2.5\text{ A}$ ; $V_{\text{CE}} = 10\text{ V}$ )	$h_{\text{FE}}$	> 15	-

**Dynamic characteristics** ( $T_{\text{case}} = 25^\circ\text{C}$ )

Transition frequency ( $I_{\text{C}} = 0.1\text{ A}$ ; $V_{\text{CE}} = 10\text{ V}$ )	$f_{\text{T}}$	6	MHz
Switching time: Fall time ( $I_{\text{C}} = 8\text{ A}$ ; $I_{\text{B1}} = -I_{\text{B2}} = 2.5\text{ A}$ )	$t_{\text{f}}$	< 1	$\mu\text{s}$

