

25C D ■ 8235605 0004847 4 ■ SIEG

7-33-13

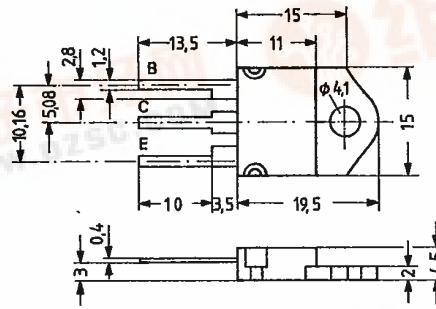
NPN Silicon Power Transistors

BU 426
BU 426 A

SIEMENS AKTIENGESELLSCHAFT

BU 426 and BU 426 A are triple diffused silicon power switching transistors in SOT 93 case (TOP 3). They are outstanding for short switching times and high dielectric strength and are particularly suitable for use in power supply units of TV receivers. The collector is electrically connected to the metallic mounting flange.

Type	Ordering code
BU 426	Q68000-A5164
BU 426 A	Q68000-A5165



Maximum ratings

	BU 426	BU 426 A	
Collector-emitter peak voltage	800	900	V
Collector-emitter voltage	375	400	V
Emitter-base voltage	7	7	V
Collector current	6	6	A
Collector peak current ($t_p \leq 2$ ms)	8	8	A
Base current	2	2	A
Base peak current	3	3	A
Negative base current ($t < 20$ ms)	0.1	0.1	A
Negative base peak current at turning off	3	3	A
Emitter current	6	6	A
Emitter-peak current	8	8	A
Junction temperature	150	150	°C
Storage temperature range	-65 to +150		°C
Total power dissipation ($T_{case} \leq 73$ °C)	70	70	W

Thermal resistance

Junction to case	R_{thJC}	≤ 1.1	≤ 1.1	K/W
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BU 426
 BU 426 A

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Static characteristics ($T_j = 25^\circ\text{C}$)

	BU 426	BU 426 A	
Collector cutoff current ($V_{BE} = 0, V_{CE} = 800\text{ V}$)	$I_{CES} \leq 1$	≤ 1	mA
($V_{BE} = 0, V_{CE} = 800\text{ V}, T_j = 125^\circ\text{C}$)	$I_{CES} \leq 2$	≤ 2	mA
Emitter cutoff current ($I_C = 0, V_{EB} = 7\text{ V}$)	$I_{EBO} \leq 10$	≤ 10	mA
Collector-emitter breakdown voltage ($I_B = 0, I_C = 100\text{ mA}, L = 25\text{ mH}$)	$V_{(BR)CEO} \geq 375$	≥ 400	V
Collector-emitter saturation voltage ($I_C = 2.5\text{ A}, I_B = 0.5\text{ A}$)	$V_{CEsat} \leq 1.5$	≤ 1.5	V
($I_C = 4.0\text{ A}, I_B = 1.25\text{ A}$)	$V_{CEsat} \leq 3$	≤ 3	V
Base-emitter saturation voltage ($I_C = 2.5\text{ A}; I_B = 0.5\text{ A}$)	$V_{BEsat} \leq 1.4$	≤ 1.4	V
($I_C = 4.0\text{ A}, I_B = 1.25\text{ A}$)	$V_{BEsat} \leq 1.6$	≤ 1.6	V
DC current gain ($V_{CE} = 5\text{ V}, I_C = 0.6\text{ A}$)	$h_{FE} 30$	30	—

Dynamic characteristics

Transition frequency ($V_{CE} = 10\text{ V}, I_C = 0.2\text{ A}, f = 1\text{ MHz}$)	f_T	6	6	MHz
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