

PNP Silicon Planar Transistors

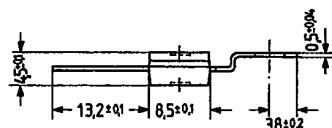
BD 487

BD 488

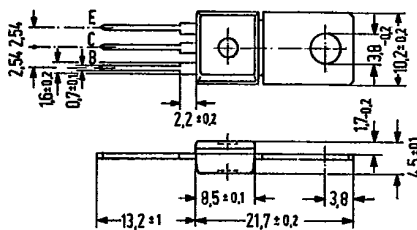
SIEMENS AKTIENGESELLSCHAFT 04373 D

BD 487 and BD 488 are epitaxial PNP silicon planar transistors in a plastic package similar to TO 202. The collector is electrically connected to the metallic mounting area. The transistors are particularly designed for switching applications in flash devices.

Type	Ordering code
BD 487	Q62702-D929
Bd 488	Q62702-D930



Available upon request also with bent fixing plate.



Approx. weight 15 g.

Dimensions in mm

Maximum ratings ($T_{amb} = 25^\circ\text{C}$)

Collector-emitter voltage	$-V_{CEO}$	25	45	V
Collector-emitter voltage	$-V_{CES}$	30	45	V
Collector-base voltage	$-V_{CBO}$	30	45	V
Emitter-base voltage	$-V_{EBO}$	5	5	V
Collector current	$-I_C$	12	12	A
Collector peak current ($t \leq 10$ ms)	$-I_{CM}$	15	15	A
Emitter peak current	I_{EM}	15	15	A
Base current	$-I_B$	2	2	A
Base peak current	I_{BM}	5	5	A
Junction temperature	T_j	150	150	$^\circ\text{C}$
Storage temperature range	T_{stg}	-55 to +150		$^\circ\text{C}$
Total power dissipation ($T_{case} = 25^\circ\text{C}$)	P_{tot}	12,5	12,5	W

Thermal resistance

Junction to ambient air	R_{thJA}	≤ 65	≤ 65	K/W
Junction to mounting area	R_{thJC}	≤ 10	≤ 10	K/W

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

		BD 487	BD 488	
Collector cutoff current ($-V_{CE} = 30\text{ V}$)	$-I_{CES}$	≤ 1	≤ 1	μA
Collector cutoff current ($-V_{CE} = 30\text{ V}; T_{amb} = 125^{\circ}\text{C}$)	$-I_{CES}$	≤ 100	≤ 100	μA
DC current gain ($-I_C = 12\text{ A}; -V_{CE} = 0.7\text{ V}$)	h_{FE}	≥ 25	≥ 25	-
Base-emitter forward voltage ($-I_C = 12\text{ A}; -V_{CE} = 0.7\text{ V}$)	$-V_{BE}$	< 1.7	< 1.7	V
DC current gain ($-I_C = 0.1\text{ A}; -V_{CE} = 0.7\text{ V}$)	h_{FE}	200	200	-
Collector-emitter forward voltage ($-I_C = 0.1\text{ A}; -V_{CE} = 0.7\text{ V}$)	$-V_{CE}$	< 0.8	< 0.8	V

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

Transition frequency ($-V_{CE} = 10\text{ V}; -I_C = 0.2\text{ A}$)	f_T	≥ 50	≥ 50	MHz
Collector-base capacitance ($-V_{CE} = 10\text{ V}$)	C_{CB}	130	130	pF
Switching times ($-I_C = 2\text{ A}; I_{B1}$ approx. I_{B2} approx. 0.2 A)	t_{on}	< 0.5	< 0.5	μs
	t_{off}	< 2	< 2	μs

