

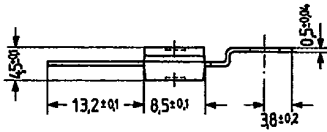
PNP Silicon Planar Transistors

BD 487  
BD 488

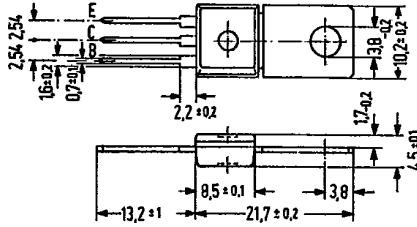
SIEMENS AKTIENGESELLSCHAFT 04373 D

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

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Thermal resistance

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

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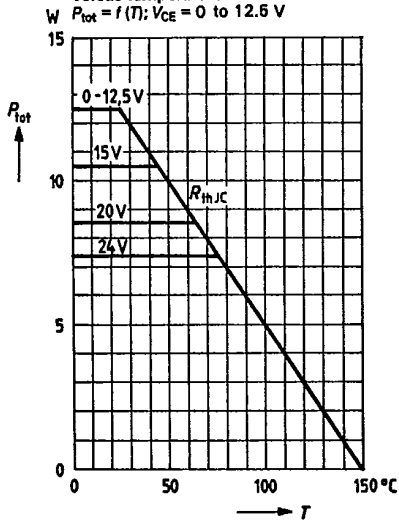
Static characteristics ( $T_{amb} = 25^{\circ}\text{C}$ )

		BD 487	BD 488	
Collector cutoff current ( $-V_{CE} = 30\text{ V}$ )	$-I_{CES}$	$\leq 1$	$\leq 1$	$\mu\text{A}$
Collector cutoff current ( $-V_{CE} = 30\text{ V}; T_{amb} = 125^{\circ}\text{C}$ )	$-I_{CES}$	$\leq 100$	$\leq 100$	$\mu\text{A}$
DC current gain ( $-I_C = 12\text{ A}; -V_{CE} = 0.7\text{ V}$ )	$h_{FE}$	$\geq 25$	$\geq 25$	-
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

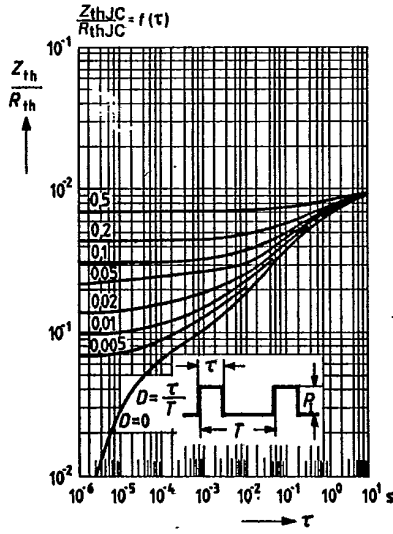
Dynamic characteristics ( $T_{amb} = 25^{\circ}\text{C}$ )

Transition frequency ( $-V_{CE} = 10\text{ V}; -I_C = 0.2\text{ A}$ )	$f_T$	$\geq 50$	$\geq 50$	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. $0.2\text{ A}$ )	$t_{on}$	$< 0.5$	$< 0.5$	$\mu\text{s}$
	$t_{off}$	$< 2$	$< 2$	$\mu\text{s}$

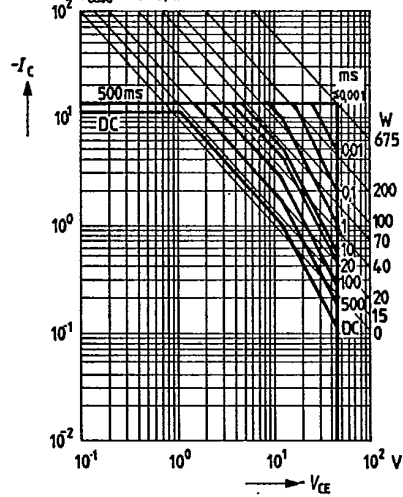
Total perm. power dissipation versus temperature



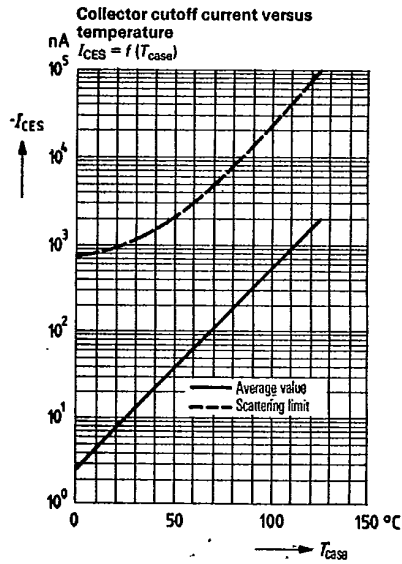
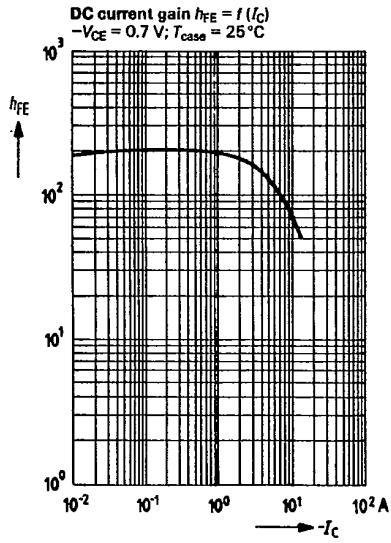
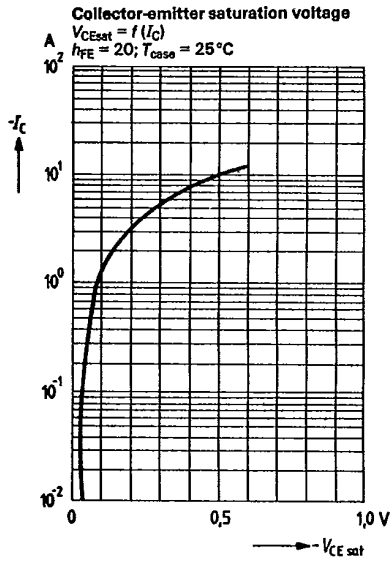
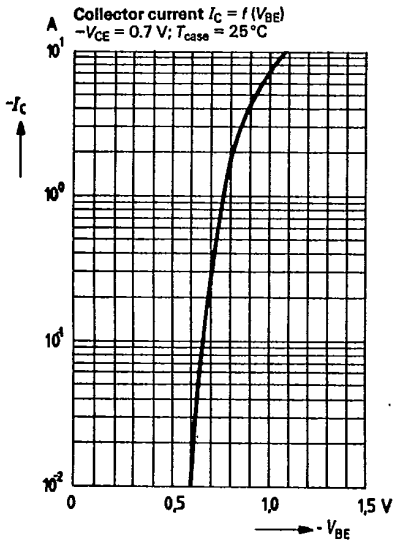
Permissible pulse load



Permissible operating range  $I_C = f(V_{CE})$   
 $T_{case} \leq 25^\circ\text{C}; D = 0$



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This datasheet has been download from:

[www.datasheetcatalog.com](http://www.datasheetcatalog.com)

Datasheets for electronics components.