

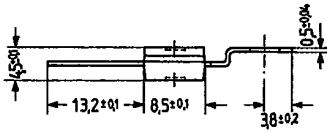
PNP Silicon Planar Transistors

BD 487
BD 488

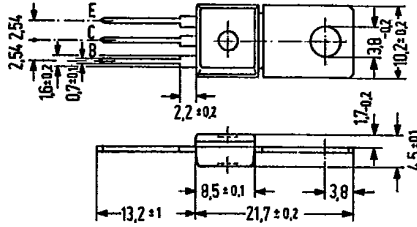
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BD 487 and BD 488 are epitaxial PNP silicon planar transistors in a plastic package similar to TO 202. The collector is electrically connected to the metallic mounting area. The transistors are particularly designed for switching applications in flash 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
- Collector-emitter voltage
- Collector-base voltage
- Emitter-base voltage
- Collector current
- Collector peak current ($t \leq 10$ ms)
- Emitter peak current
- Base current
- Base peak current
- Junction temperature
- Storage temperature range
- Total power dissipation ($T_{case} = 25^\circ\text{C}$)

	BD 487	BD 488	
$-V_{CEO}$	25	45	V
$-V_{CES}$	30	45	V
$-V_{CBO}$	30	45	V
$-V_{EBO}$	5	5	V
$-I_C$	12	12	A
$-I_{CM}$	15	15	A
I_{EM}	15	15	A
$-I_B$	2	2	A
I_{BM}	5	5	A
T_j	150	150	$^\circ\text{C}$
T_{stg}	-55 to +150		$^\circ\text{C}$
P_{tot}	12,5	12,5	W

Thermal resistance

- Junction to ambient air
- Junction to mounting area

R_{thJA}	≤ 65	≤ 65	K/W
R_{thJC}	≤ 10	≤ 10	K/W

T-33-19

BD 487
 BD 488

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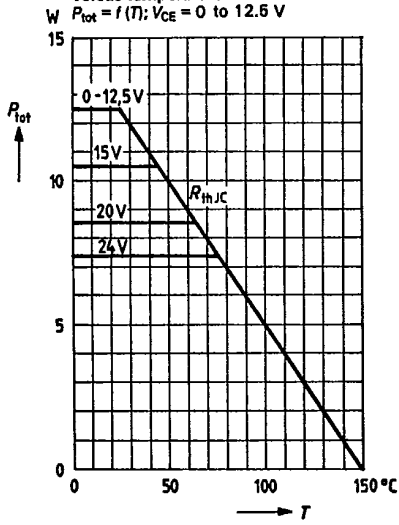
Static characteristics ($T_{amb} = 25^{\circ}\text{C}$)

		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

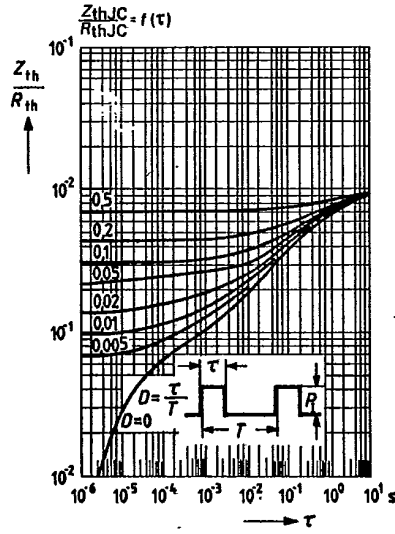
Dynamic characteristics ($T_{amb} = 25^{\circ}\text{C}$)

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

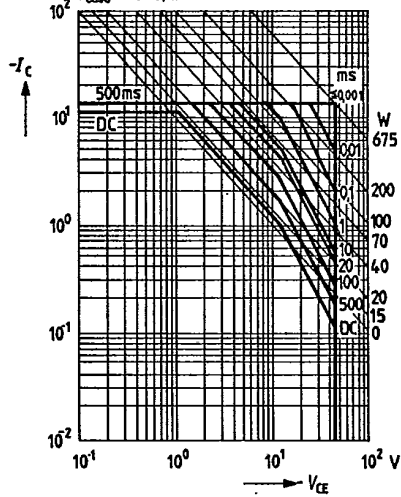
Total perm. power dissipation versus temperature



Permissible pulse load



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



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