

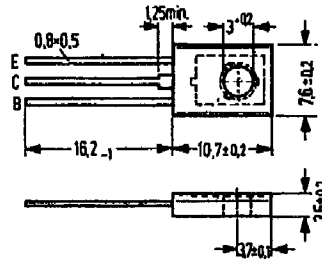
PNP Silicon Planar Transistors

BD 287
 BD 288

BD 287 and BD 288 are epitaxial planar transistors in TO 126 plastic package (12 A 3 DIN 41869, sheet 4). The collector is electrically connected to the metallic mounting area. The transistors are particularly designed for switching applications in flash devices.

Type

- BD 287
- BD 288
- Spring washer
- A3 DIN 137
- Mica washer



Approx. weight 0.6 g Dimensions in mm
 Transistor fixing with M3 screw. Starting torque max. 0.8 Nm. Washer or spring washer should be used.

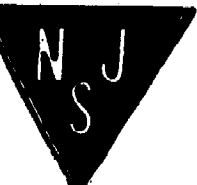
Maximum ratings ($T_{amb} = 25^{\circ}\text{C}$)

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}	-50 to +150		$^{\circ}\text{C}$
Total power dissipation ($T_{case} = 25^{\circ}\text{C}$)	P_{tot}	36	36	W

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Thermal resistance

Junction to ambient air	R_{thJA}	≤ 100	≤ 100	K/W
Junction to mounting area	R_{thJC}	$\leq 3,5$	$\leq 3,5$	K/W



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

	BD 287	BD 288	
Collector cutoff current ($-V_{CE} = 30\text{ V}$)	$-I_{CES} \leq 1$	≤ 1	μA
Collector cutoff current ($-V_{CE} = 30\text{ V}; T_{amb} = 125^{\circ}\text{C}$)	$-I_{CES} \leq 100$	≤ 100	μA
DC current gain ($-I_C = 12\text{ A}; -V_{CE} = 0.7\text{ V}$)	$h_{FE} \geq 25$	≥ 25	-
DC current gain ($-I_C = 0.1\text{ A}; -V_{CE} = 0.7\text{ V}$)	$h_{FE} = 200$	200	-
Base-emitter forward voltage ($-I_C = 12\text{ A}; -V_{CE} = 0.7\text{ V}$)	$-V_{BE} < 1.7$	< 1.7	V
Base-emitter forward voltage ($-I_C = 0.1\text{ A}; -V_{CE} = 0.7\text{ V}$)	$-V_{BE} < 0.8$	< 0.8	V

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

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