

PNP Silicon Planar Transistor

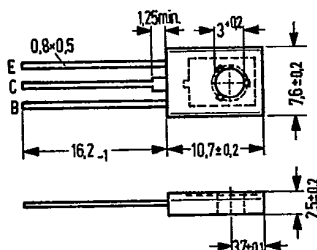
BD 330

25C 04349 D T-33-17

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BD 330 is an epitaxial PNP silicon planar transistor in TO 126 plastic package (12 A 3 DIN 41 869, sheet 4). Together with its complementary transistor BD 329 it is particularly suitable for use in complementary output stages of medium performance (e.g. car radios).

Type	Ordering code
BD 330	Q62702-D395
BD 330/BD 329 paired	Q62702-D401
Spring washer A 3 DIN 137	Q62902-B63



Approx. weight 0.5 g

Turning torque of the M3 screw used for mounting: 0.8 Nm,
washer or spring washer should be used.

Maximum ratings

Collector-emitter voltage
Collector-emitter voltage
Emitter-base voltage
Collector current
Emitter current
Base current
Junction temperature
Storage temperature range
Total power dissipation ($T_{amb} = 25^\circ\text{C}$)

$-V_{CES}$	32	V
$-V_{CEO}$	20	V
$-V_{EBO}$	5	V
$-I_C$	3	A
$-I_E$	3	A
$-I_B$	1	A
T_j	150	$^\circ\text{C}$
T_{stg}	-55 to +150	$^\circ\text{C}$
P_{tot}	15	W

Thermal resistance

Junction to ambient air
Junction to mounting area

R_{thJA}	≤ 100	K/W
R_{thJC}	≤ 7	K/W

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

Collector-emitter saturation voltage

($-I_C = 2\text{ A}$; $-I_B = 200\text{ mA}$)

Collector cutoff current

($-V_{CB} = 32\text{ V}$)

Collector cutoff current

($-V_{CB} = 32\text{ V}$; $T_j = 150^\circ\text{C}$)

Emitter cutoff current

($-V_{EB} = 5\text{ V}$)

Base-emitter voltage

($-V_{CE} = 10\text{ V}$; $-I_C = 5\text{ mA}$)($-V_{CE} = 1\text{ V}$; $-I_C = 2\text{ A}$)

DC current gain

($-V_{CE} = 10\text{ V}$; $-I_C = 5\text{ mA}$)($-V_{CE} = 1\text{ V}$; $-I_C = 0.5\text{ A}$)($-V_{CE} = 1\text{ V}$; $-I_C = 2\text{ A}$)

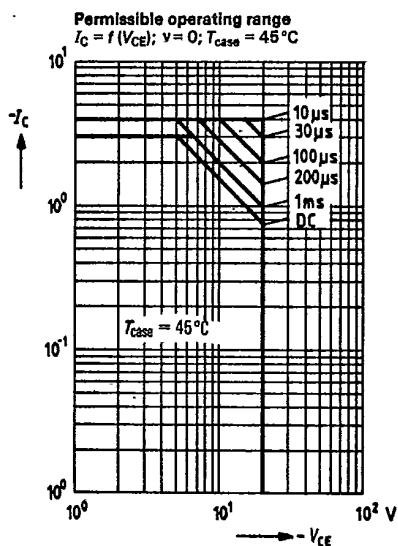
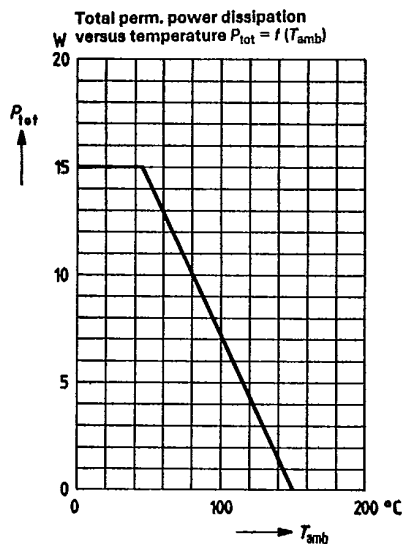
$-V_{CEsat}$	≤ 0.5	V
$-I_{CBO}$	≤ 10	μA
$-I_{CBO}$	≤ 1	mA
$-I_{EBO}$	≤ 10	μA
$-V_{BE}$	0.6	V
$-V_{BE}$	≤ 1.2	V
h_{FE}	> 50	—
h_{FE}	85 to 375	—
h_{FE}	> 40	—

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

Transition frequency

($-V_{CE} = 5\text{ V}$; $-I_C = 50\text{ mA}$)

f_T	100	MHz
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