TELEFUNKEN electronic
Creative Technologies

BD 127 · BD 128 · BD 129

T-33-07

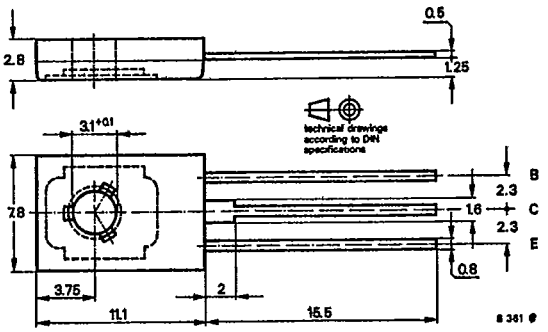
Silicon NPN Planar Power Transistors

Applications: General at high supply voltages

Features:

- High reverse voltage
- Power dissipation 17.5 W

Dimensions in mm



Collector connected with metallic surface

Standard plastic case
12 A 3 DIN 41 869
JEDEC TO 126 (SOT 32)
Weight max. 0.8 g

Accessories

Isolating washer No. 119 880
Washer 3.2 DIN 125A

Absolute maximum ratings		BD 127	BD 128	BD 129	
Collector-base voltage	V_{CBO}	300	350	400	V
Collector-emitter voltage	V_{CEO}	250	300	350	V
Emitter-base voltage	V_{EBO}		5		V
Collector current	I_C		500		mA
Total power dissipation $T_{case} \leq 45$ °C	P_{tot}		17,5		W
Junction temperature	T_j		150		°C
Storage temperature range	T_{stg}		−55 ...+150		°C
Tightening torque	M_A [1]		70		N cm

Maximum thermal resistance

Junction case	R_{thJC}		6		K/W

[1] with screw M3 and washer 3.2 DIN 125A

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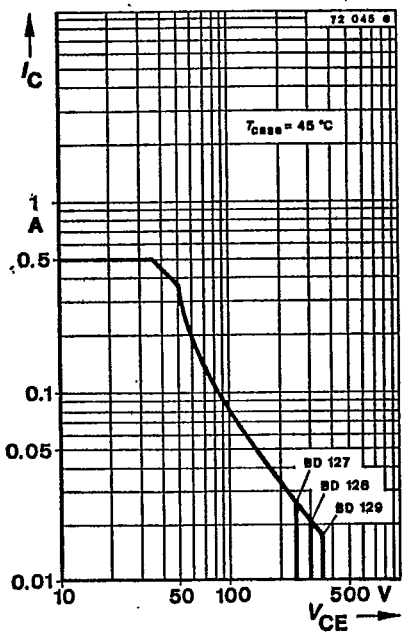
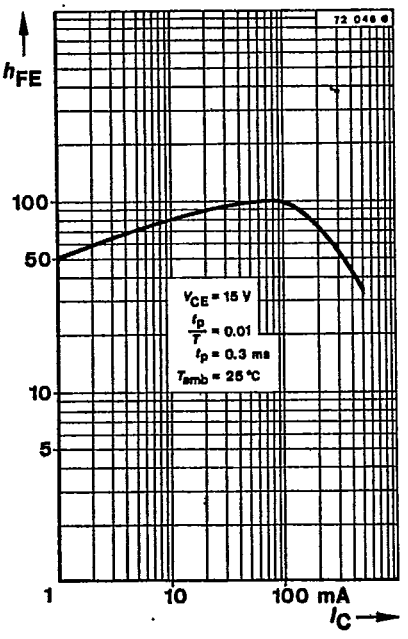
Characteristics			Min.	Typ.	Max.	
$T_{amb} = 25\,°C$, unless otherwise specified						
Collector cut-off current						
$V_{CB} = 150\,V$		I_{CBO}			50	nA
$V_{CB} = 150\,V$, $T_{amb} = 150\,°C$		I_{CBO}			100	µA
Collector-base breakdown voltage						
$I_C = 1\,µA$	BD 127	$V_{(BR)CBO}$	300			V
	BD 128	$V_{(BR)CBO}$	350			V
	BD 129	$V_{(BR)CBO}$	400			V
Collector-emitter breakdown voltage						
$I_C = 1\,mA$	BD 127	$V_{(BR)CEO}$ [1]	250			V
	BD 128	$V_{(BR)CEO}$ [1]	300			V
	BD 129	$V_{(BR)CEO}$ [1]	350			V
Emitter-base breakdown voltage						
$I_E = 1\,µA$		$V_{(BR)EBO}$	5			V
DC forward current transfer ratio						
$V_{CE} = 15\,V$, $I_C = 1\,mA$		h_{FE}		50		
$V_{CE} = 15\,V$, $I_C = 50\,mA$		h_{FE} [1]	30			





[1] $\frac{t_p}{T} = 0.01$, $t_p = 0.3\,ms$