



T-33-07

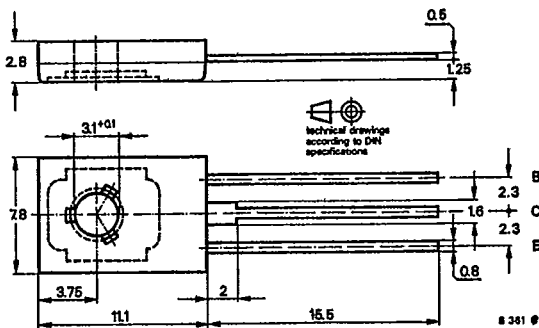
**Silicon NPN Planar Power Transistors**

**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. 119880
- Washer 3.2 DIN 125A

**Absolute maximum ratings**

	BD 127	BD 128	BD 129	
Collector-base voltage	300	350	400	V
Collector-emitter voltage	250	300	350	V
Emitter-base voltage		5		V
Collector current		500		mA
Total power dissipation $T_{case} \leq 45^\circ C$		17.5		W
Junction temperature		150		$^\circ C$
Storage temperature range		-55 ... +150		$^\circ C$
Tightening torque		70		N cm

**Maximum thermal resistance**

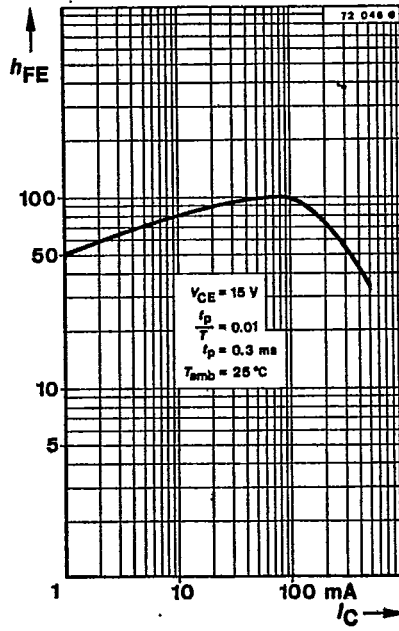
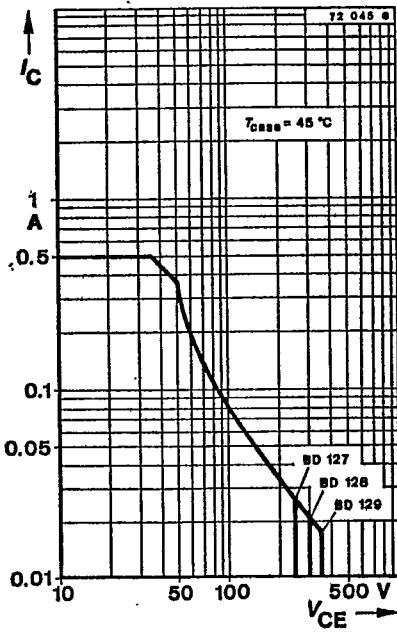
Junction case	$R_{thJC}$	6	K/W
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<sup>1)</sup> with screw M3 and washer 3.2 DIN 125A

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Characteristics	Min.	Typ.	Max.
$T_{amb} = 25^\circ\text{C}$ , unless otherwise specified			
Collector cut-off current			
$V_{CB} = 150\text{ V}$	$I_{CBO}$		50 nA
$V_{CB} = 150\text{ V}, T_{amb} = 150^\circ\text{C}$	$I_{CBO}$		100 $\mu\text{A}$
Collector-base breakdown voltage			
$I_C = 1\ \mu\text{A}$	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			
$I_C = 1\text{ mA}$	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			
$I_E = 1\ \mu\text{A}$		$V_{(BR)EBO}$	5 V
DC forward current transfer ratio			
$V_{CE} = 15\text{ V}, I_C = 1\text{ mA}$		$h_{FE1}$	50
$V_{CE} = 15\text{ V}, I_C = 50\text{ mA}$		$h_{FE}$	30



<sup>1)</sup>  $\frac{I_p}{T} = 0.01, t_p = 0.3\text{ ms}$