

/ Descriptions

Silicon PNP transistor in a TO-126F Plastic Package.

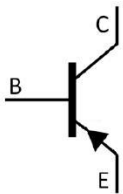
/ Features

Complement to BD135.

/ Applications

Medium power linear and switching applications.

/ Equivalent Circuit



/ Pinning



PIN1 Emitter PIN 2 Collector PIN 3 Base

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	6	10	16
h_{FE} Range	40 100	63 160	100 250

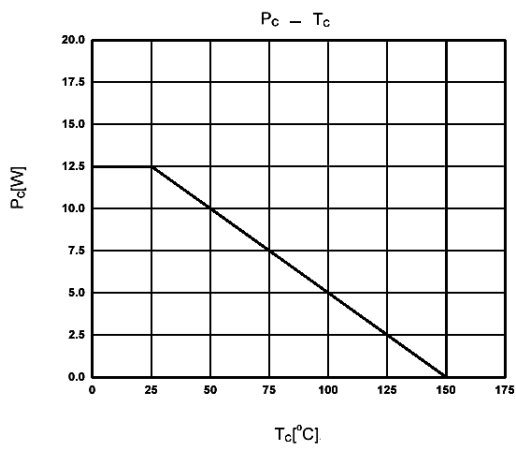
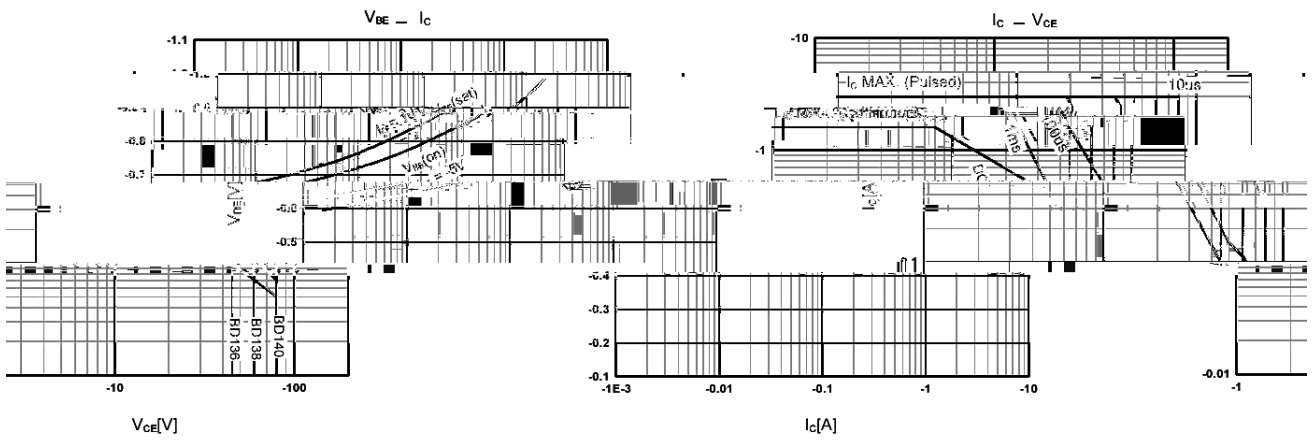
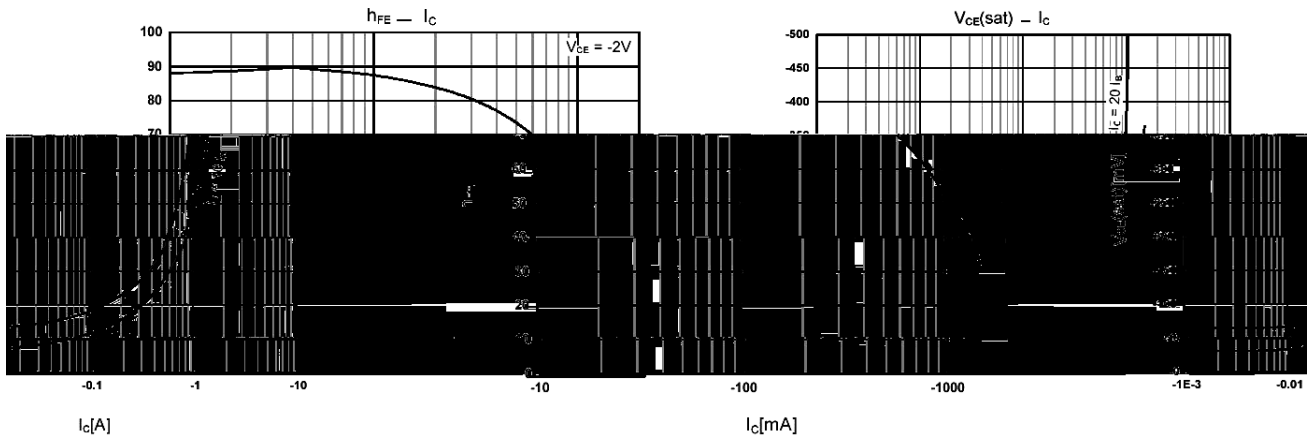
/ Absolute Maximum Ratings($T_a=25$)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-45	V
Collector to Emitter Voltage	V_{CEO}	-45	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-1.5	A
Collector Current – Continuous	I_{CP}	-3.0	A
Base Current – Continuous	I_B	-0.5	A
Collector Power Dissipation	P_C	1.25	W
Collector Power Dissipation	$P_C(T_c=25^\circ\text{C})$	12.5	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 150	$^\circ\text{C}$

/ Electrical Characteristics($T_a=25$)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-30\text{mA}$ $I_B=0$	-45			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-30\text{V}$ $I_E=0$			-0.1	A
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-5.0\text{V}$ $I_C=0$			-10	A
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-2.0\text{V}$ $I_C=-150\text{mA}$	40		250	
	$h_{FE(2)}$	$V_{CE}=-2.0\text{V}$ $I_C=-500\text{mA}$	25			
	$h_{FE(3)}$	$V_{CE}=-2.0\text{V}$ $I_C=-5.0\text{mA}$	25			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-500\text{mA}$ $I_B=-50\text{mA}$			-0.5	V
Base to Emitter On Voltage	$V_{BE(on)}$	$V_{CE}=-2.0\text{V}$ $I_C=-500\text{mA}$			-1.0	V

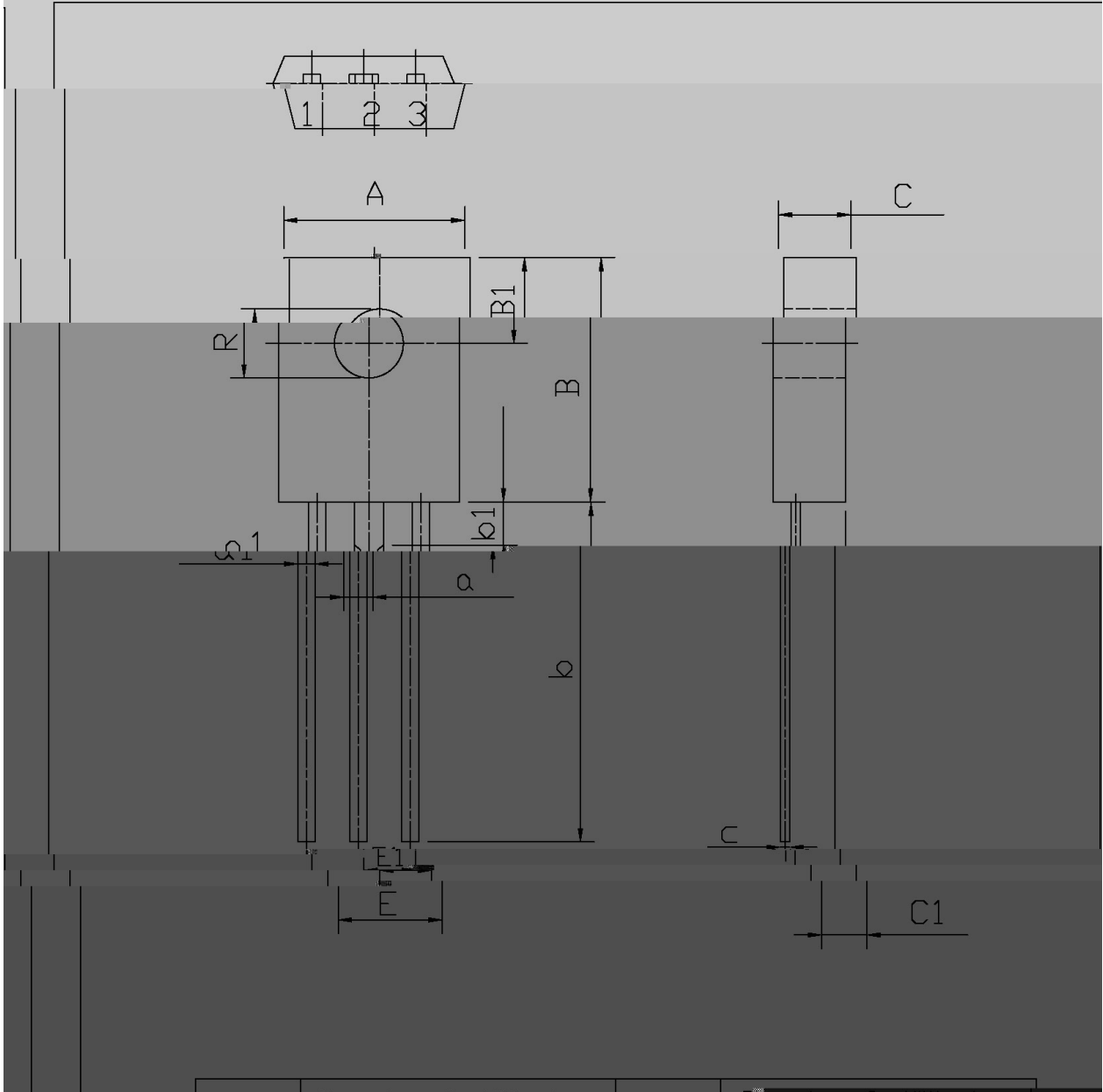
/ Electrical Characteristic Curve



/ Package Dimensions

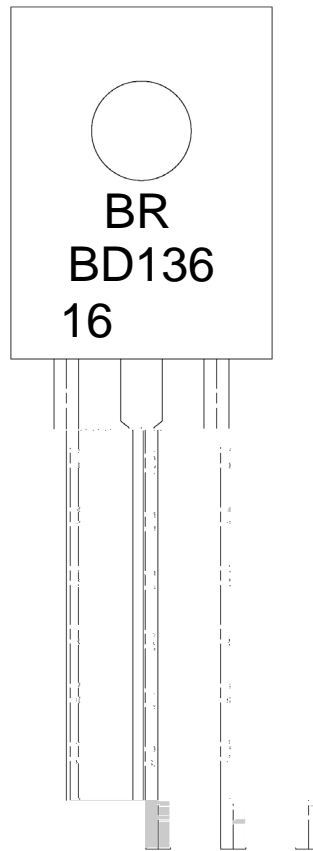
10-126T

單位: mm



Symbol	Dimension	Symbol	Dimension

/ Marking Instructions



Note:

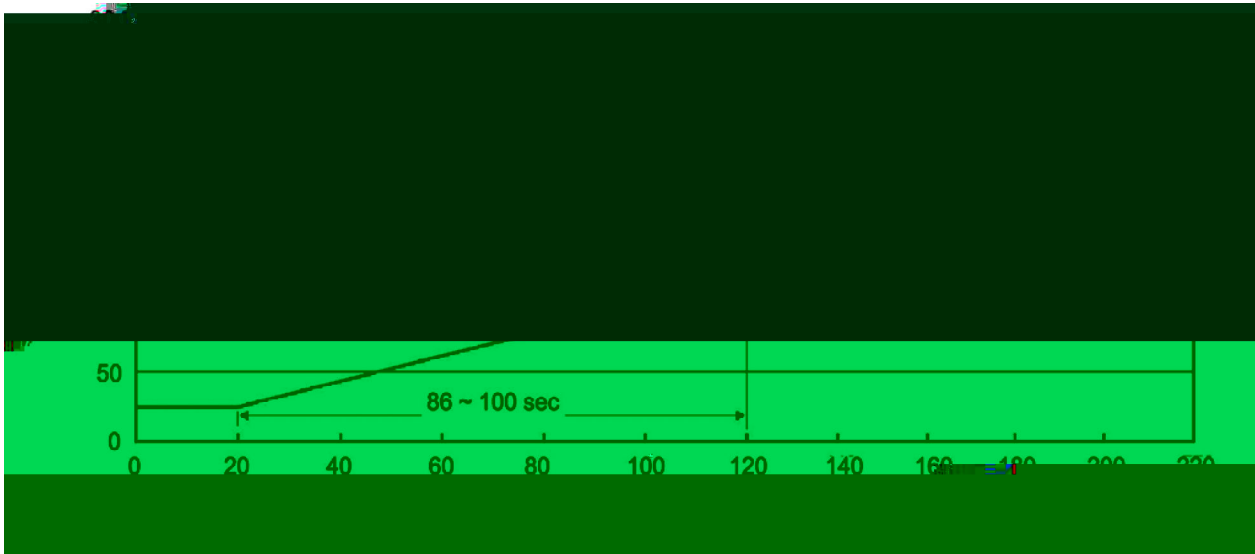
BR: Company Code

BD136: Product Type.

16: h_{FE} Classifications Symbol

****: Lot No. Code, code change with Lot No.

() / Temperature Profile for Dip Soldering(Pb-Free)



- | | | | | | | |
|---|-----|-----|----|----------|-------|---|
| 1 | 25 | 150 | 60 | 90sec; | Note: | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 255 | 5 | 5 | 0.5sec; | | 2.Peak Temp.:255 5 , Duration:5 0.5sec. |
| 3 | | | 2 | 10 /sec. | | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

270 5 10 1 sec. Temp.:270±5°C Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type	Units	Dimension	(unit mm ³)
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