

# BD177

Rev.E Mar.-2016

## / Descriptions

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

## / Features

BD178  
Complement to BD178.

## / Applications

Medium power linear and switching applications.

## / Equivalent Circuit



## / Pinning



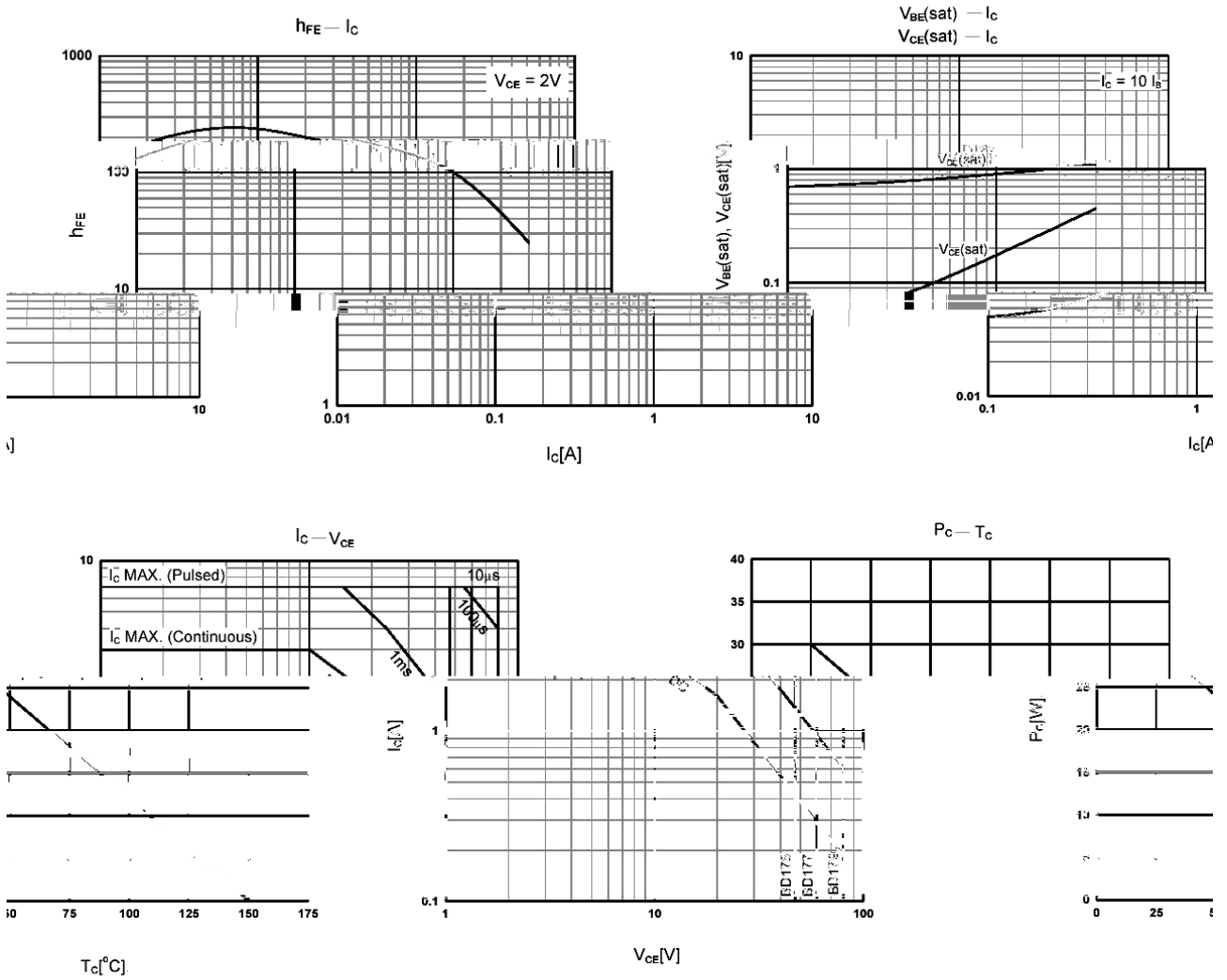
PIN1 Emitter      PIN 2 Collector      PIN 3 Base

## / $h_{FE}$ Classifications & Marking

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

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	60	V
Collector to Emitter Voltage	$V_{CEO}$	60	V
Emitter to Base Voltage	$V_{EBO}$	5.0	V
Collector Current - Continuous	$I_C$	3.0	A
Collector Current – Continuous(Pulse)	$I_{CP}$	7.0	A
Collector Power Dissipation	$P_C(T_C=25 \text{ } ^\circ\text{C})$	30	W
Junction Temperature	$T_j$	150	
Storage Temperature Range	$T_{stg}$	-55~150	

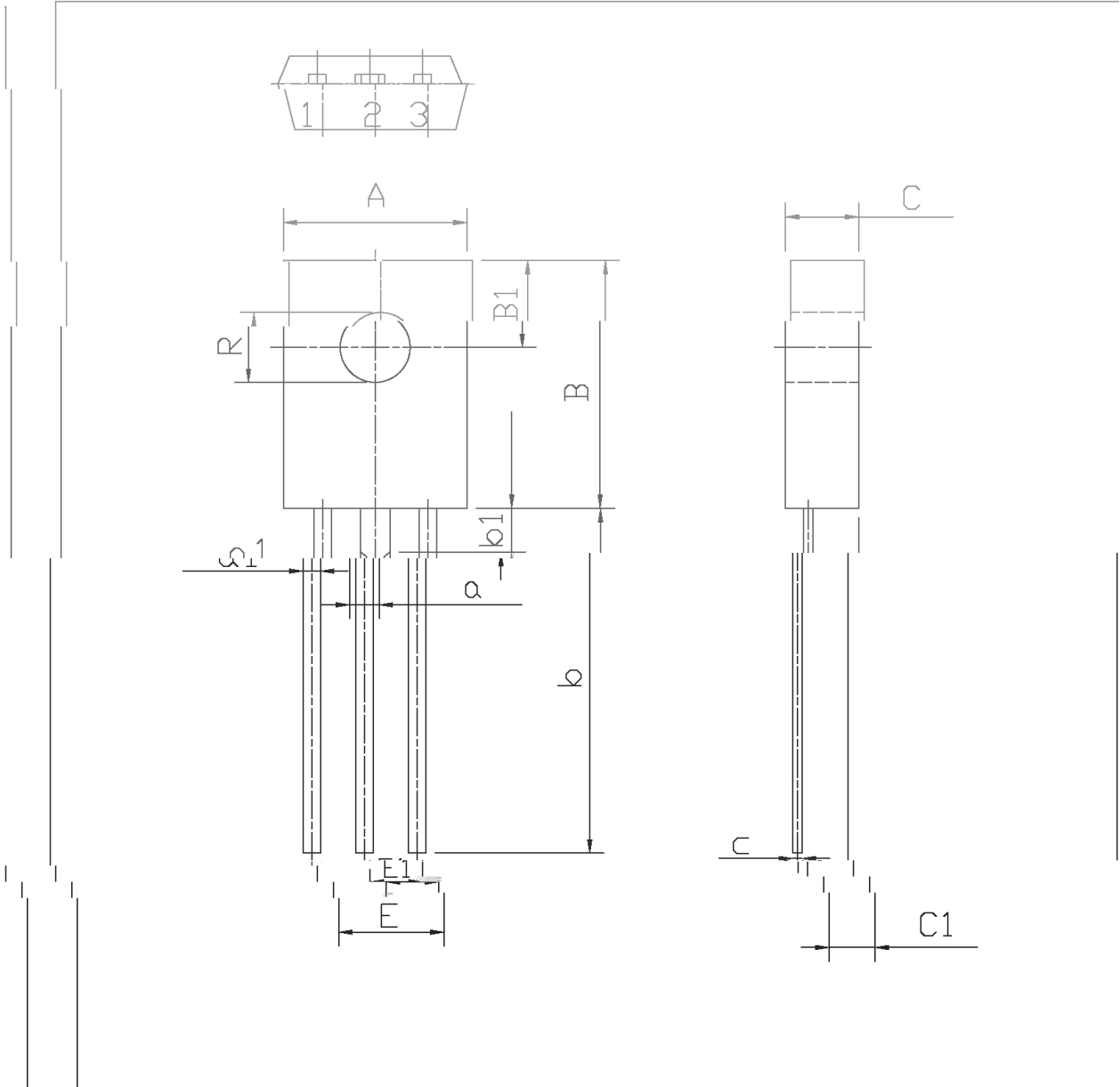
**/ Electrical Characteristic Curve**



/ Package Dimensions

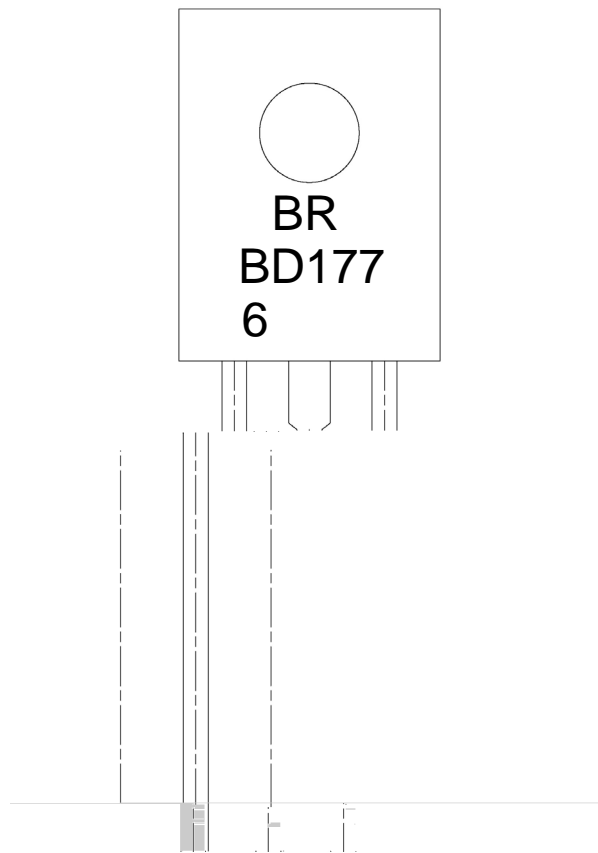
TU-126T

单位: mm



Symbol	Dimension in Millimeters		Symbol	Dimension in Millimeters	
	Min	Max		Min	Max
A	7.8	8.2	a1	0.55	0.85
B	10.8	11.2	E	4.4	4.8
B1	3.8	4.2	C	3.1	3.3
R	2.05	3.15	C1	1.9	2.1
b	14	16	c	0.3	0.6
b1		1.9	a		1.27
E1	2.1	2.5			

/ Marking Instructions



BR

BD177

6

$h_{FE}$

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Note:

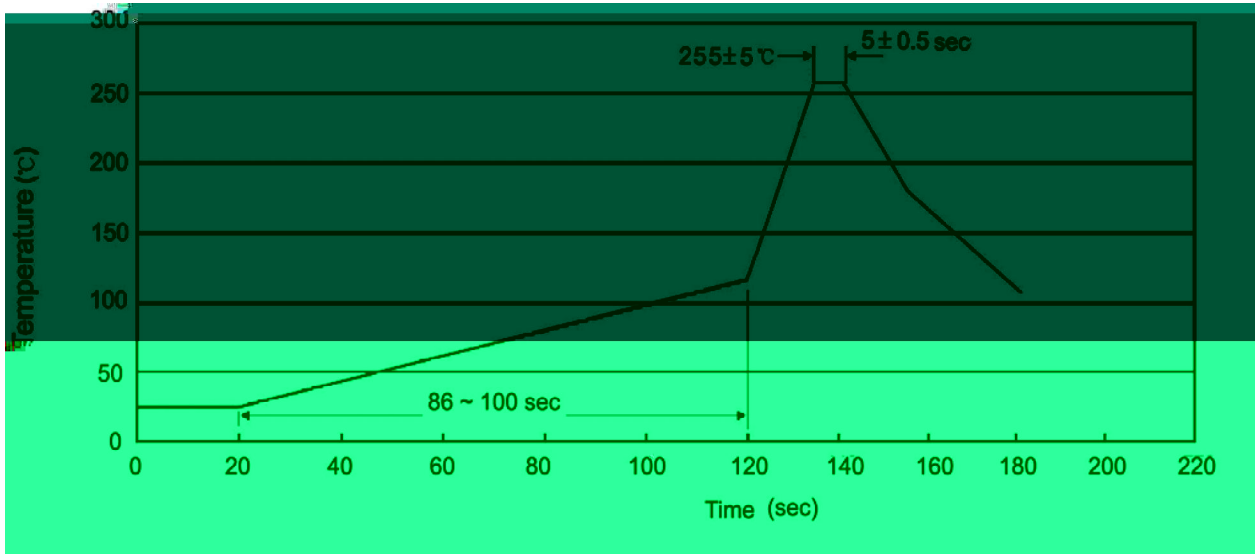
BR: Company Code

BD177: Product Type.

6  $h_{FE}$  Classifications Symbol

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

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



Note:

- |   |       |     |           |        |   |
|---|-------|-----|-----------|--------|---|
| 1 | 25    | 150 | 60        | 90sec; | 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                      Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type	Units				Dimension (unit mm <sup>3</sup> )		

/ TUBE

Package Type	Units				Dimension (unit mm <sup>3</sup> )		

/ Notices