/ Descriptions

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

/ Features

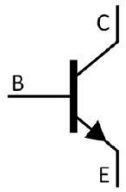
BD178

Complement to BD178.

/ Applications

Medium power linear and switching applications.

/ Equivalent Circuit



/ Pinning

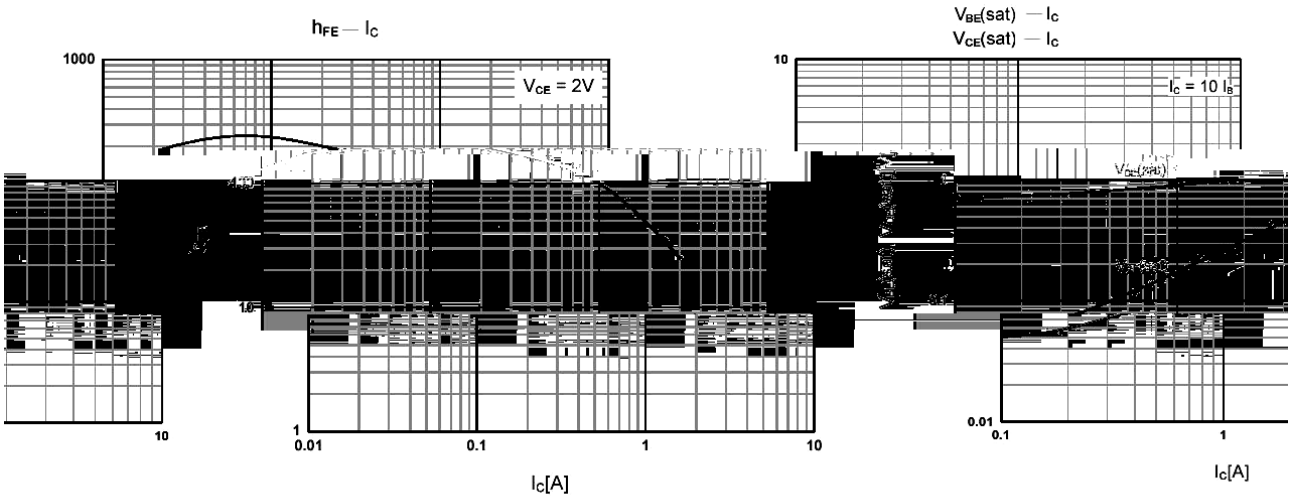
PIN1 Emitter PIN 2 Collector PIN 3 Base

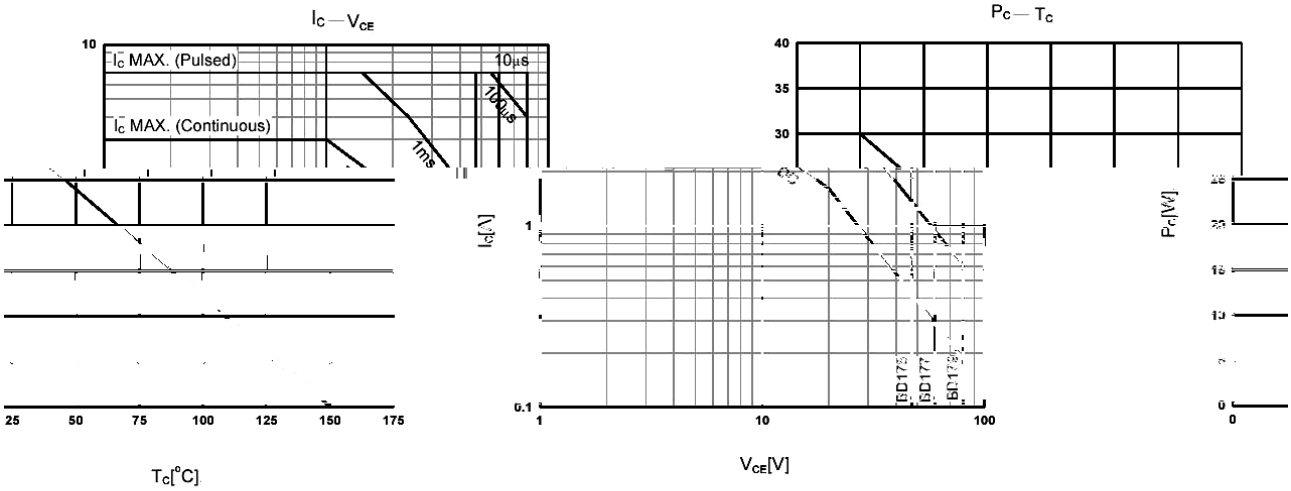
/ h_{FE} Classifications & Marking

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(Tc=25)	30	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55～150	

/ Electrical Characteristic Curve

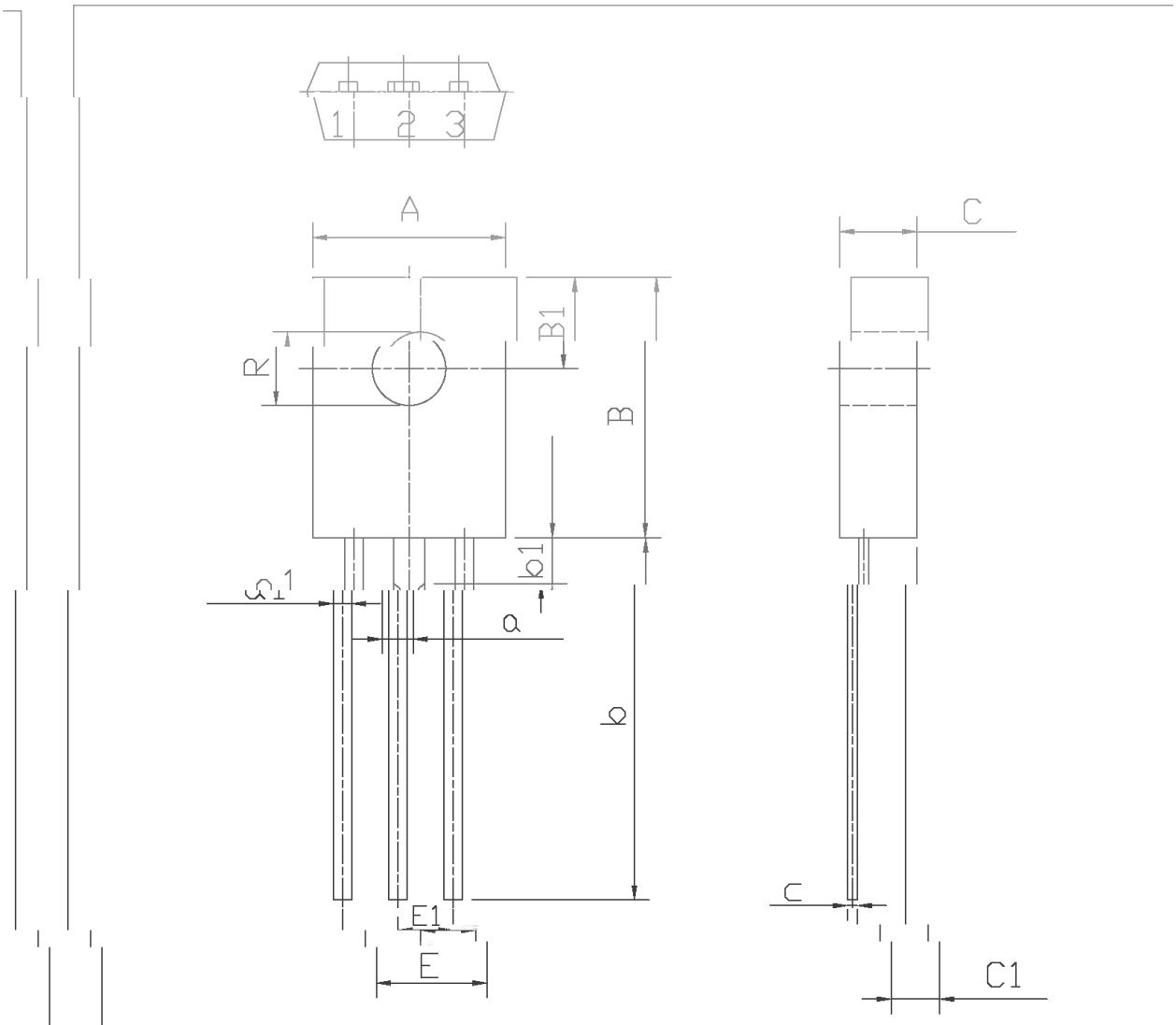




/ Package Dimensions

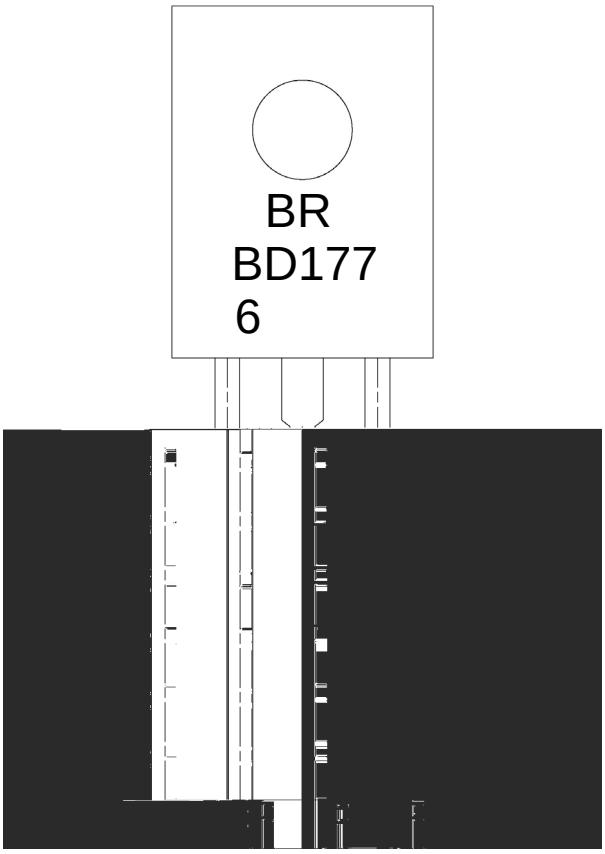
TO-126

单位：mm



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	7.8	8.2	a1	0.66	0.86
B	10.8	11.2	E	4.4	4.8
B1	3.8	4.2	C	3.1	3.3
R	2.95	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

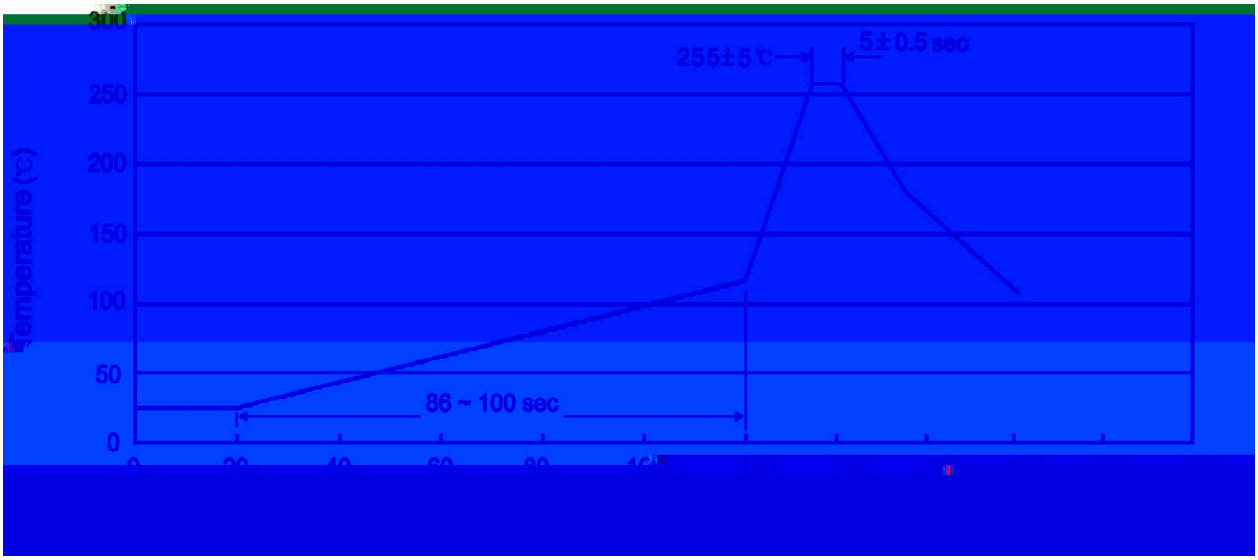
6 h_{FE}

****

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^3)

/ TUBE

Package Type	Units					Dimension		(unit mm^3)

/ Notices