

/ Descriptions

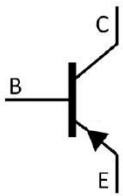
Silicon PNP transistor in a TO-126F Plastic Package.

/ Features

Complementary pair with BD437.

/ Applications

Medium power linear and switching applications.

/ Equivalent Circuit**/ Pinning**

PIN1 Emitter PIN 2 Collector PIN 3 Base

/ h_{FE} Classifications & Marking

See Marking Instructions

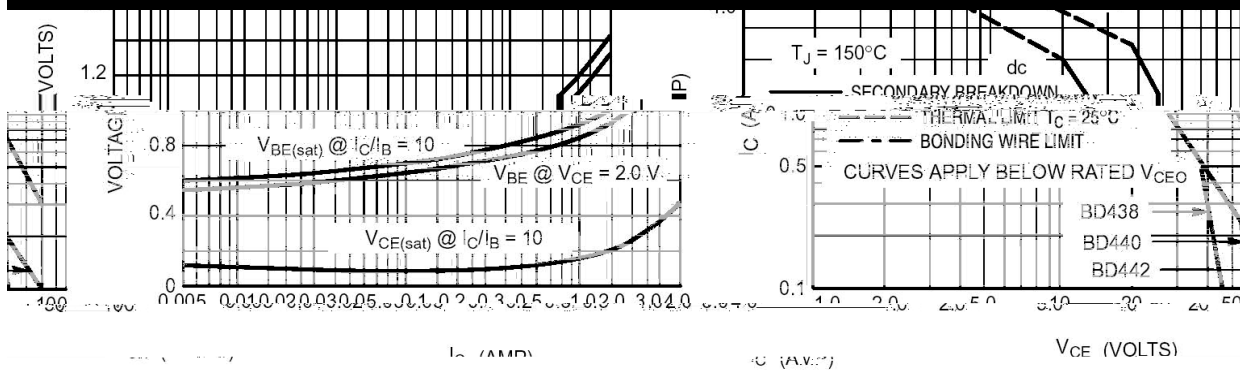
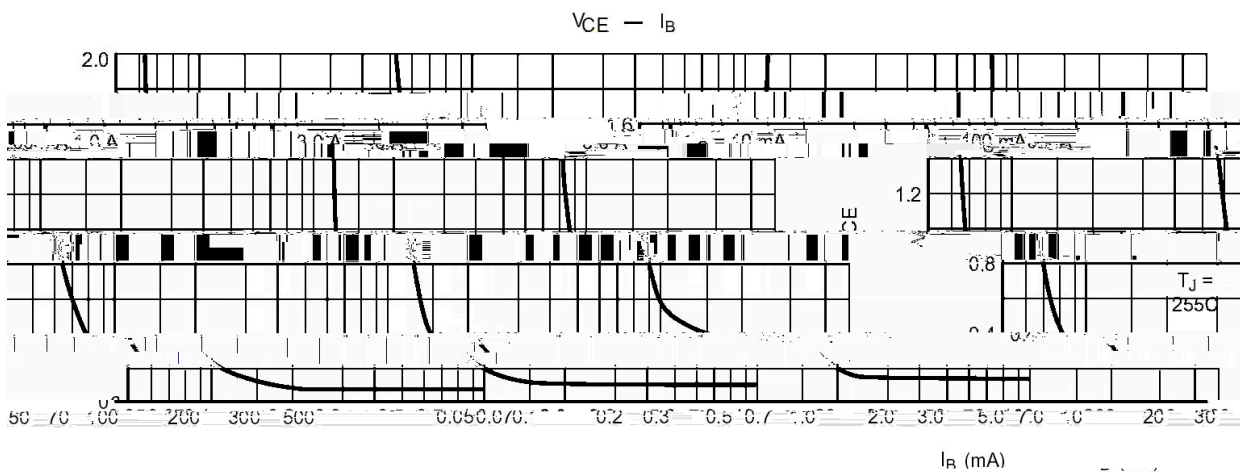
/ Absolute Maximum Ratings(Ta=25)

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	-4.0	A
Base Current - Continuous	I_B	-1.0	A
Collector Power Dissipation	$P_C(T_c=25)$	36	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

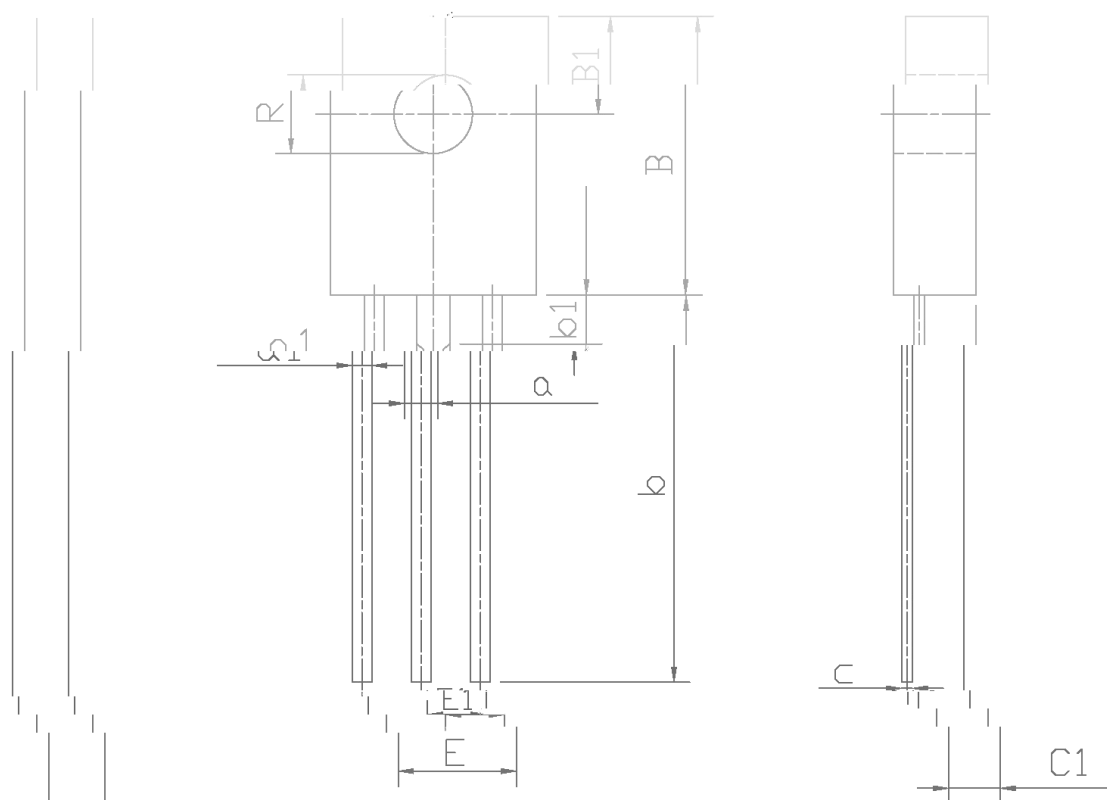
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-100mA$ $I_B=0$	-45			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-45V$ $I_E=0$			-100	A
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-5.0V$ $I_C=0$			-1.0	mA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-1.0V$ $I_C=-500mA$	85		375	
	$h_{FE(2)}$	$V_{CE}=-5.0V$ $I_C=-10mA$	30			
	$h_{FE(3)}$	$V_{CE}=-1.0V$ $I_C=-2.0A$	40			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-3.0A$ $I_B=-0.3A$			-0.7	V
Base to Emitter On Voltage	$V_{BE(on)}$	$V_{CE}=-1.0V$ $I_C=-2.0A$			-1.1	V
Transition Frequency	f_T	$V_{CE}=-1.0V$ $I_C=-250mA$	3.0			MHz

/ Electrical Characteristic Curve

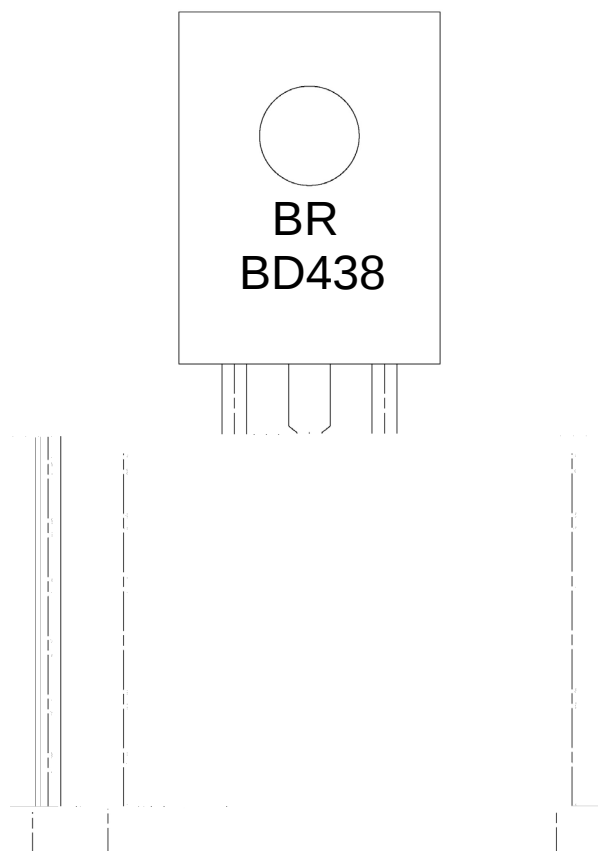


/ Package Dimensions



Dimensions in Millimeters			Dimensions in Millimeters		
Symbol	Min	Max	Symbol	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	1.2	2.1
b	14	16	c	0.3	0.6
b1	1.9		a	1.27	
E1	2.1	2.5			

/ Marking Instructions

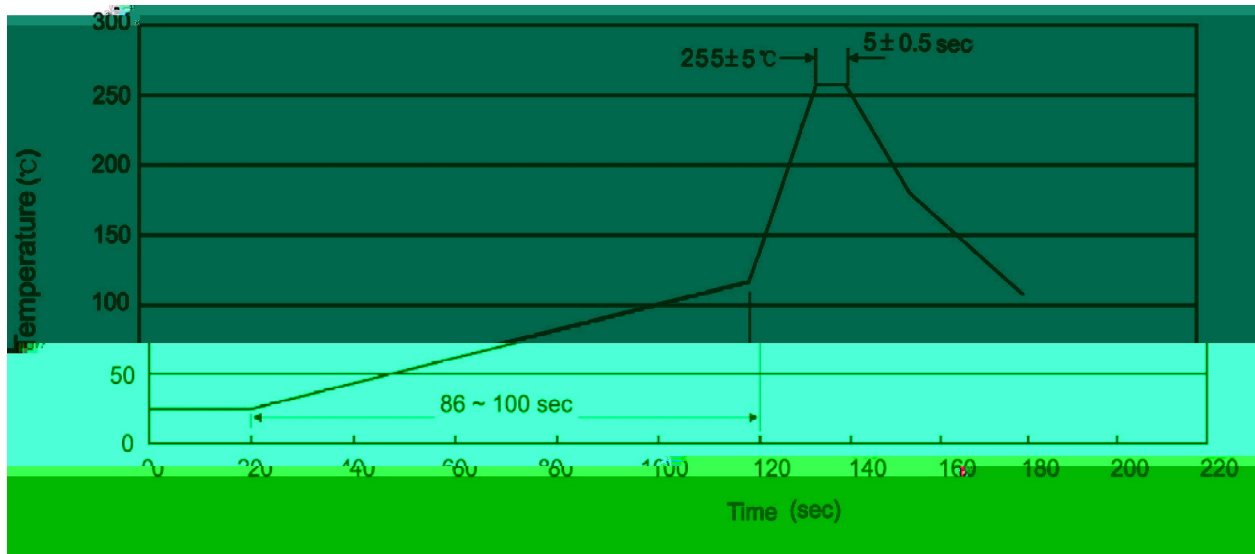


Note:

BR: Company Code

BD438: Product Type.

****: 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 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只 套管	套管 盒	只 盒	盒 箱	只 箱	套管	盒	箱

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只 套管	套管 盒	只 盒	盒 箱	只 箱	套管	盒	箱

/ Notices