

BD235

Rev.E Mar.-2016

TO-126F

NPN

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

BD236

Complementary pair with BD236.

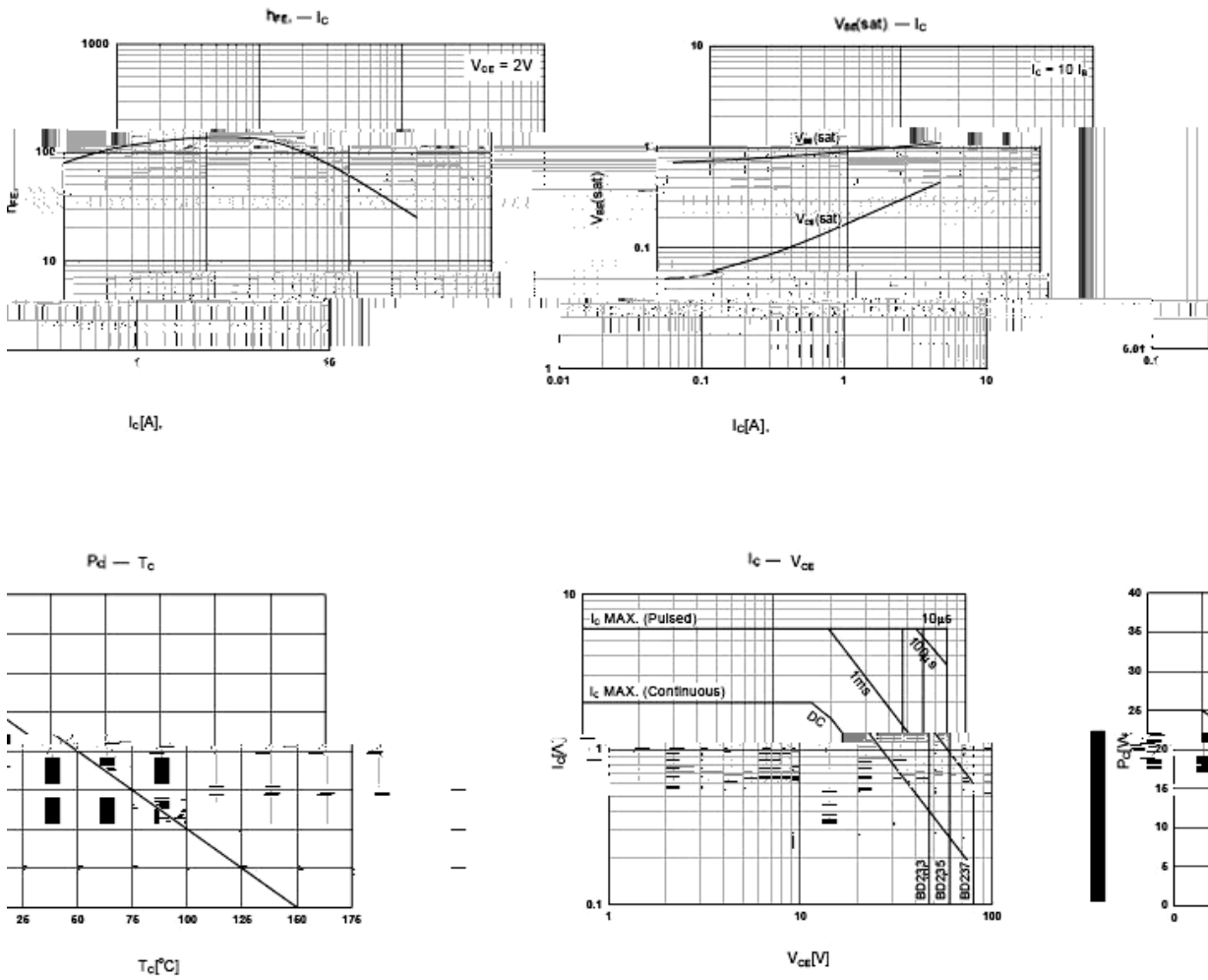
/ Absolute Maximum Ratings(Ta=25)

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	2.0	A
Collector Current – Continuous(Pulse)	I_{CP}	6.0	A
Collector Power Dissipation	P_C	1.0	W
Collector Power Dissipation	$P_C(T_C=25)$	25	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}	$I_C=100mA$ $I_B=0$	60			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=60V$ $I_E=0$			100	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=5.0V$ $I_C=0$			1.0	mA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=2.0V$ $I_C=150mA$	40		400	
	$h_{FE(2)}$	$V_{CE}=2.0V$ $I_C=1.0A$	25			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=1.0A$ $I_B=0.1A$			0.6	V
Base to Emitter Voltage	V_{BE}	$V_{CE}=2.0V$ $I_C=1.0A$			1.3	V
Transition Frequency	f_T	$V_{CE}=10V$ $I_C=250mA$	3.0			MHz

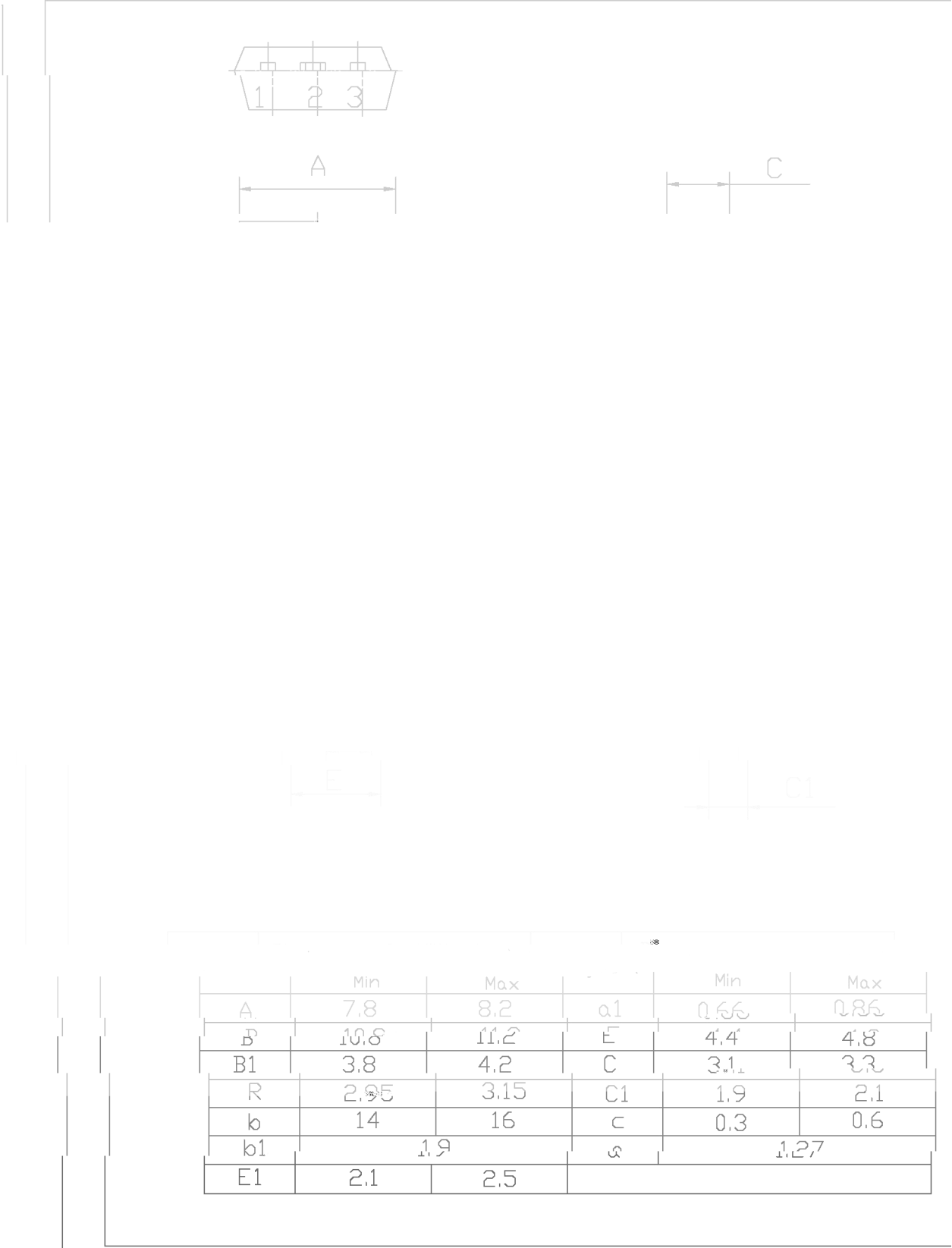
/ Electrical Characteristic Curve



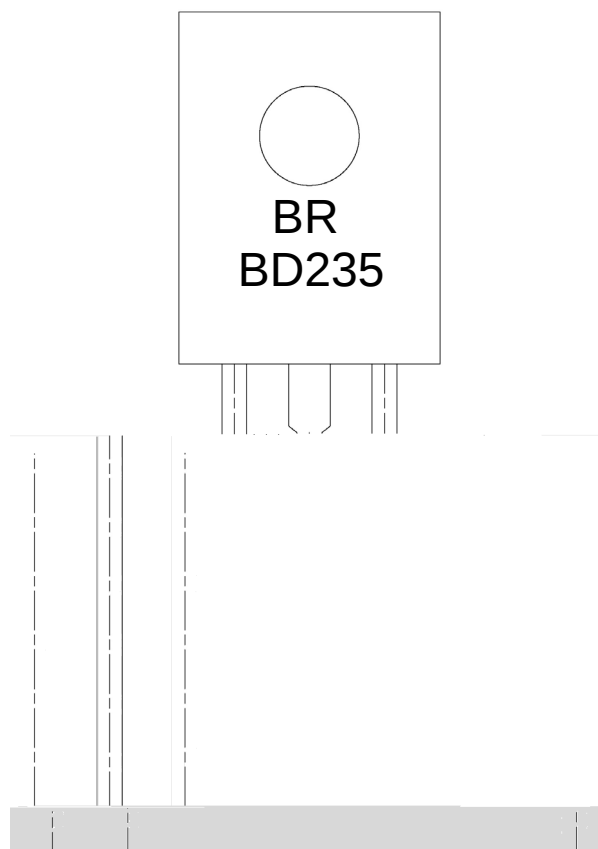
/ Package Dimensions

1U-126T

单位: mm



/ Marking Instructions



BR

BD235

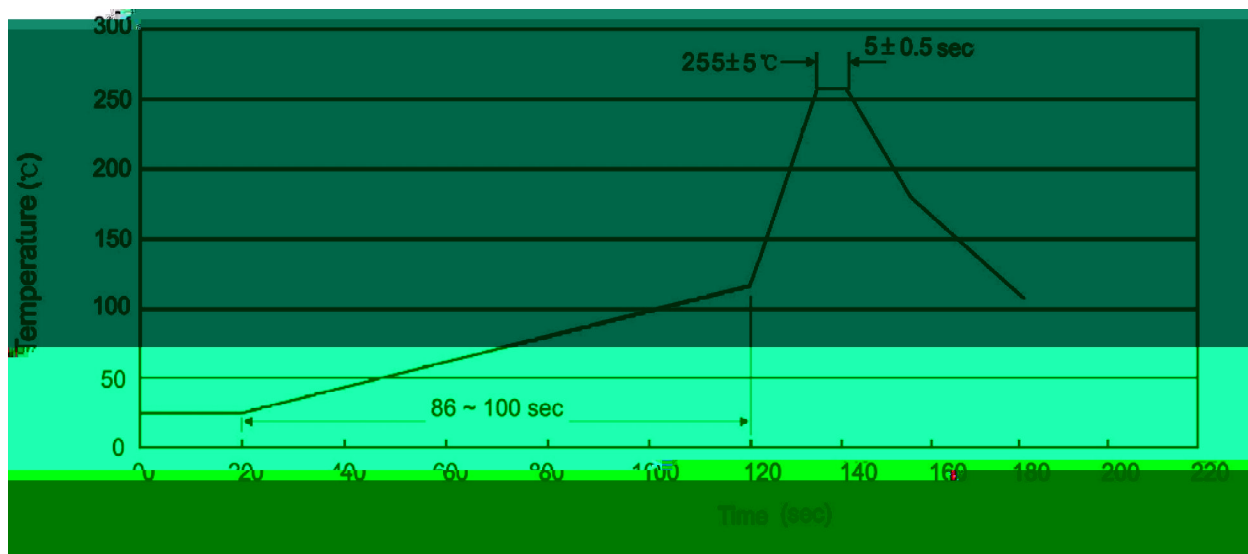
Note:

BR: Company Code

BD235: Product Type.

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

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



Note:

- 1 25 150 60 90sec;
- 2 255±5 5±0.5sec;
- 3 2 10 /sec.

- 1.Preheating:25~150 , Time:60~90sec.
- 2.Peak Temp.:255±5 , Duration:5±0.5sec.
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