BD233

Rev.E Mar.-2016

DATA SHEET

/ Descriptions

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

/ Features

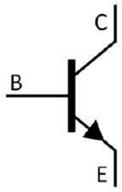
BD234

Complementary pair with BD234.

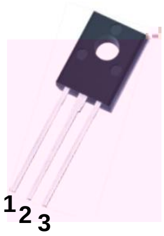
/ Applications

Medium power linear and switching applications.

/ Equivalent Circuit



/ Pinning



PIN1 Emitter PIN 2 Collector PIN 3 Base

/ h_{FE} Classifications & Marking

See Marking Instructions

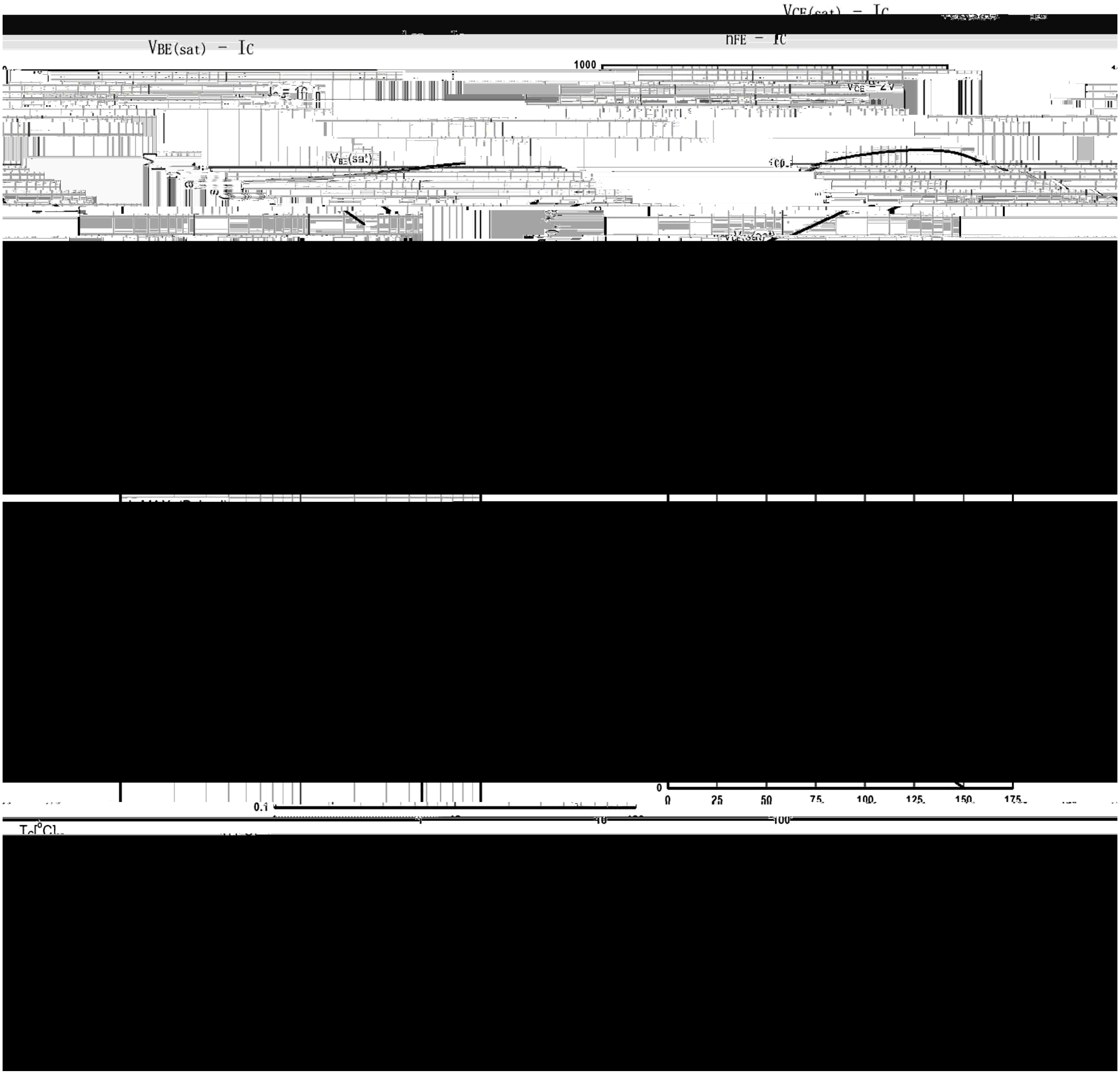
/ Absolute Maximum Ratings(Ta=25)

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

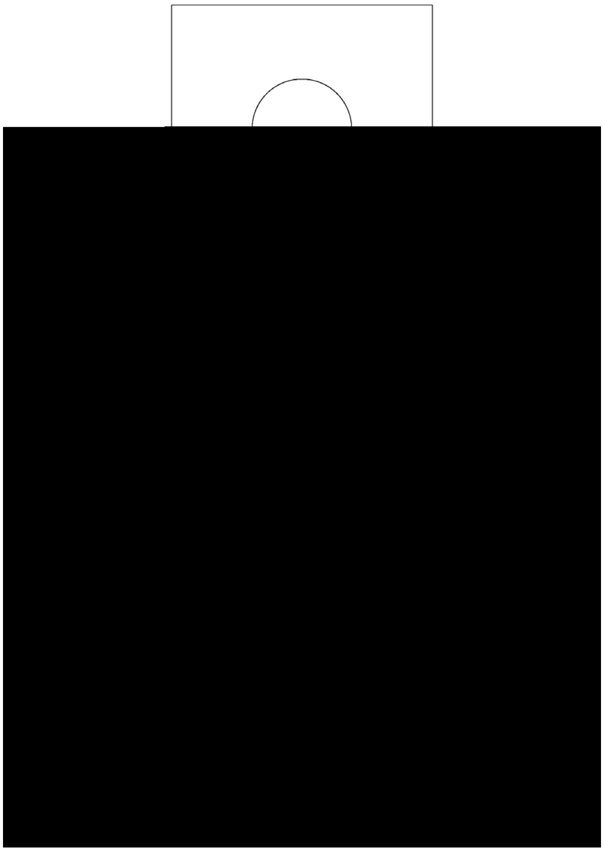
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=100mA I_B=0	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}=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



/ Marking Instructions



BR

BD233

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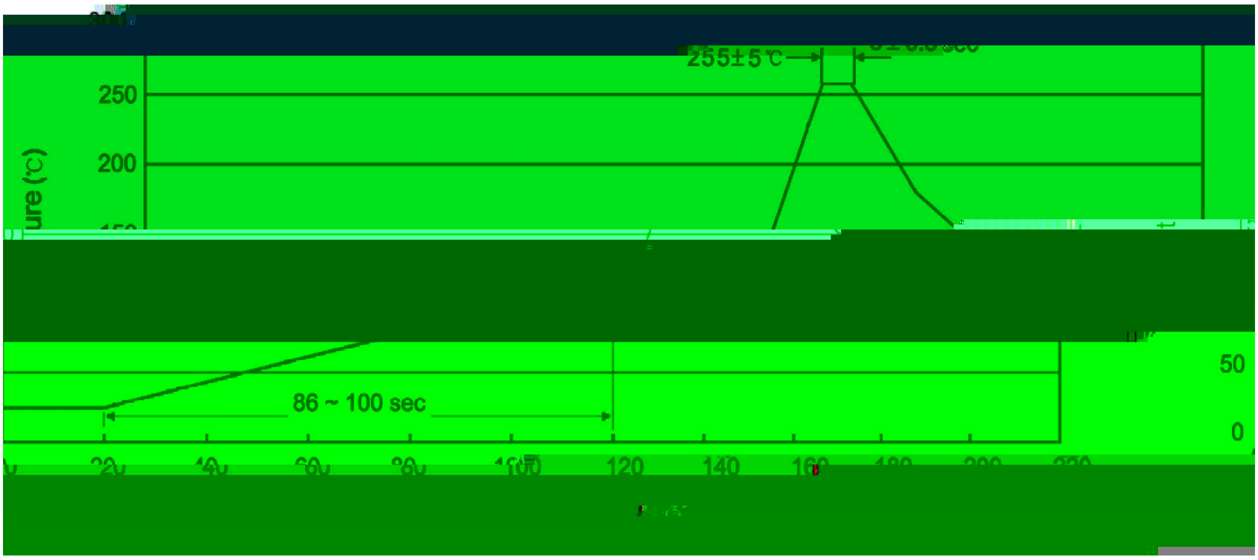
Note:

BR:	Company Code
BD233:	Product Type.
****:	Lot No. Code, code change with Lot No.

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



1　　25　150　　60　90sec;

2　　255

Note:

1.Preheating:25~150　, Time:60~90sec.