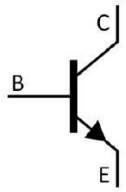
TO-126F NPN Silicon NPN transistor in a TO-126F Plastic Package.

BD234

Complementary pair with BD234.

Medium power linear and switching applications.

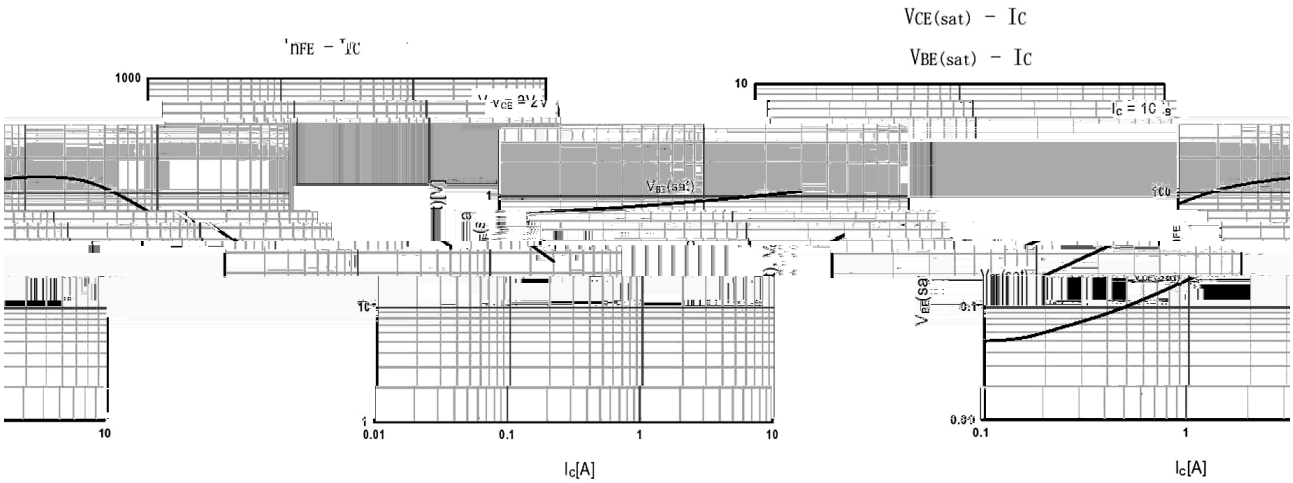


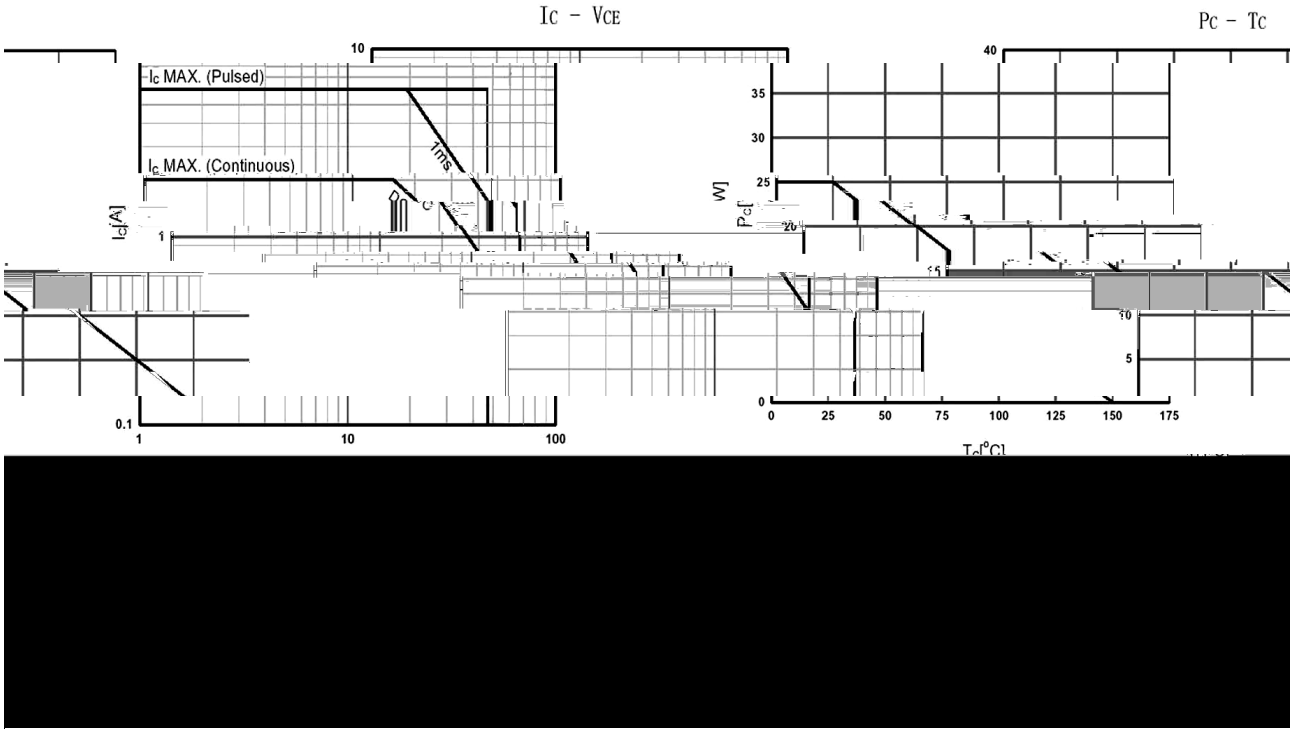
PIN1 Emitter PIN 2 Collector PIN 3 Base

See Marking Instructions

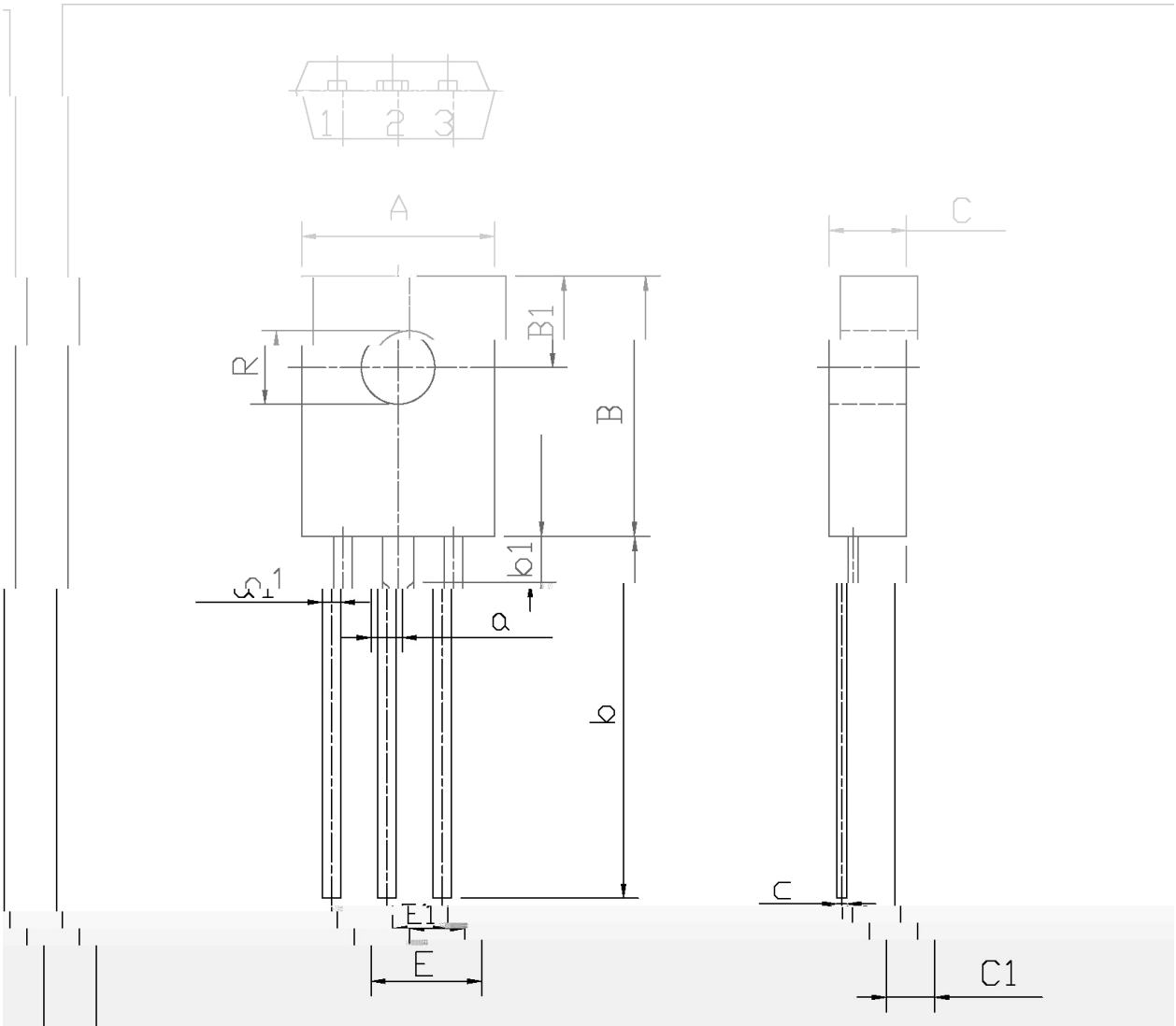
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	45	V
Collector to Emitter Voltage	V_{CEO}	45	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	2.0	A
Collector Current – Continuous(Pulse)	I_{CP}	6.0	A
Collector Power Dissipation	P_C	1.0	W
Collector Power Dissipation	P_C(Tc=25)	25	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

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

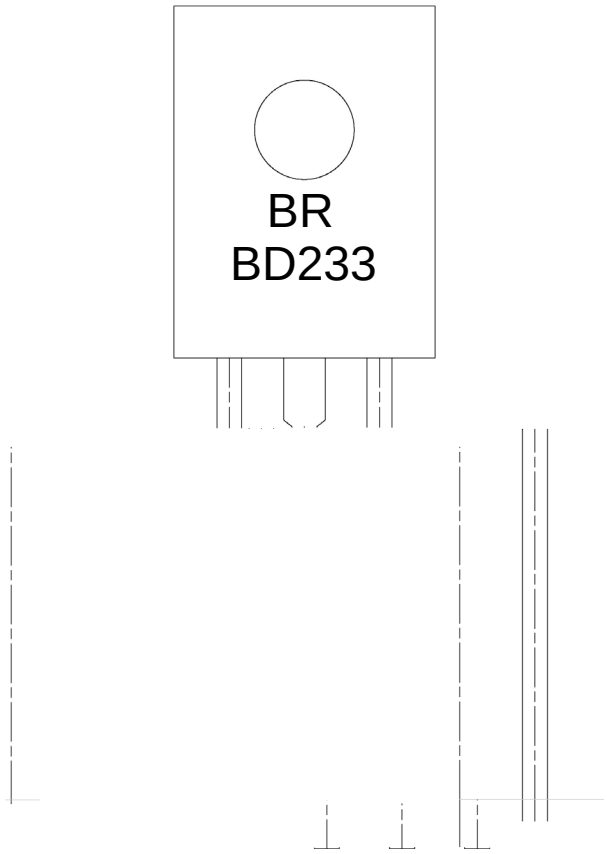

VCE(sat) – IC
VBE(sat) – IC
IC = 10 IB
1000
10
1
0.01
0.1
1
10
0.1
1
IC[A]
IC[A]


IC – VCE
PC – TC
IC MAX. (Pulsed)
IC MAX. (Continuous)
1ms
10
1
0.1
1
10
100
IC[A]
40
35
30
25
20
15
10
5
0
0
25
50
75
100
125
150
175
PC[W]
TC[°C]

TO-126F 单位：mm



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	7.8	8.2	a1	0.65	0.85
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	1.19		a	1.27	
E1	2.1	2.5			



BR

BD233

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Note:

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

					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	-				