

BD544

Rev. H Oct.-2018

/ Descriptions

TO-220

PNP

Silicon PNP transistor in a TO-220 Plastic Package.

/ Features

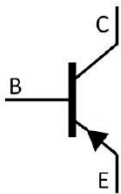
BD543

High I_C , high P_C , complement to BD543.

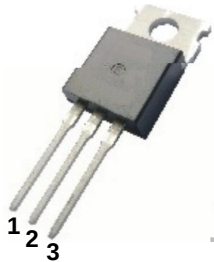
/ Applications

Medium power amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base

PIN 2 Collector

PIN 3 Emitter

/ h_{FE} Classifications & Marking

See Marking Instructions.

/ Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

Parameter	Symbol		Rating	Unit
Collector to Base Voltage	V _{CBO}	BD544	-40	V
		BD544A	-60	V
		BD544B	-80	V
		BD544C	-100	V
Collector to Emitter Voltage	V _{CEO}	BD544	-40	V
		BD544A	-60	V
		BD544B	-80	V
		BD544C	-100	V
Emitter to Base Voltage	V _{EBO}		-5.0	V
Collector Current - Continuous	I _C		-8.0	A
Peak Collector Current	I _{CM}		-10	A
Collector Power Dissipation	P _C		2.0	W
	P _C (T _c =25 °C)		70	W
Junction Temperature	T _j		-55 150	
Storage Temperature Range	T _{sag}		-55 150	
Lead temperature 3.2 mm from case for 10 seconds	T _L		260	

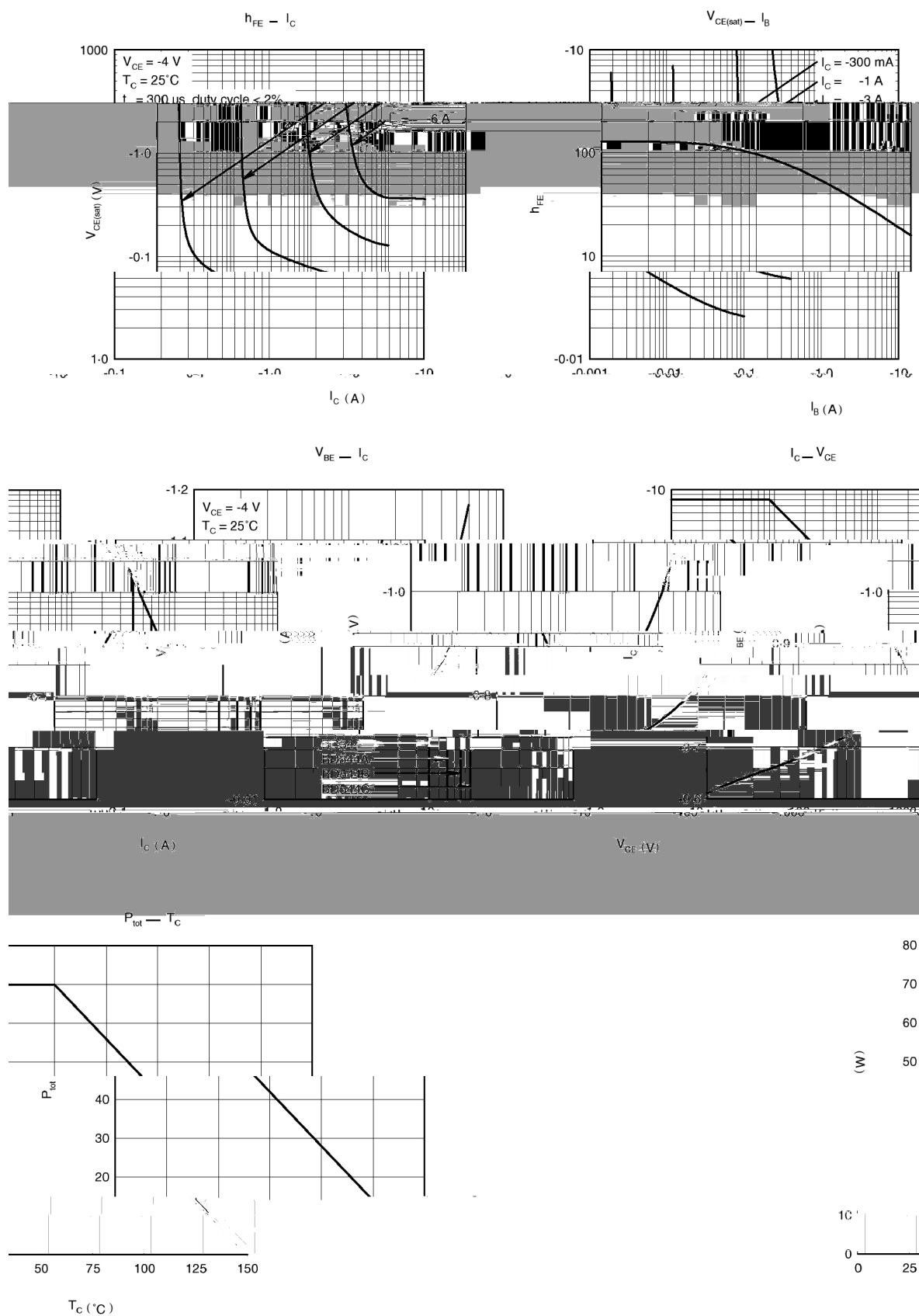
/ Electrical Characteristics($T_a=25^\circ\text{C}$)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-30\text{mA}$ $I_B=0$	BD544	-40		V
			BD544A	-60		
			BD544B	-80		
			BD544C	-100		
Collector Cut-Off Current	I_{CEO}	BD544 BD544A	$V_{CE}=-30\text{V}$ $I_B=0$		-0.7	mA
		BD544B BD544C	$V_{CE}=-60\text{V}$ $I_B=0$			
Collector Cut-Off Current	I_{CES}	BD544	$V_{CE}=-40\text{V}$ $V_{EB}=0$		-0.4	mA
		BD544A	$V_{CE}=-60\text{V}$ $V_{EB}=0$			
		BD544B	$V_{CE}=-80\text{V}$ $V_{EB}=0$			
		BD544C	$V_{CE}=-100\text{V}$ $V_{EB}=0$			

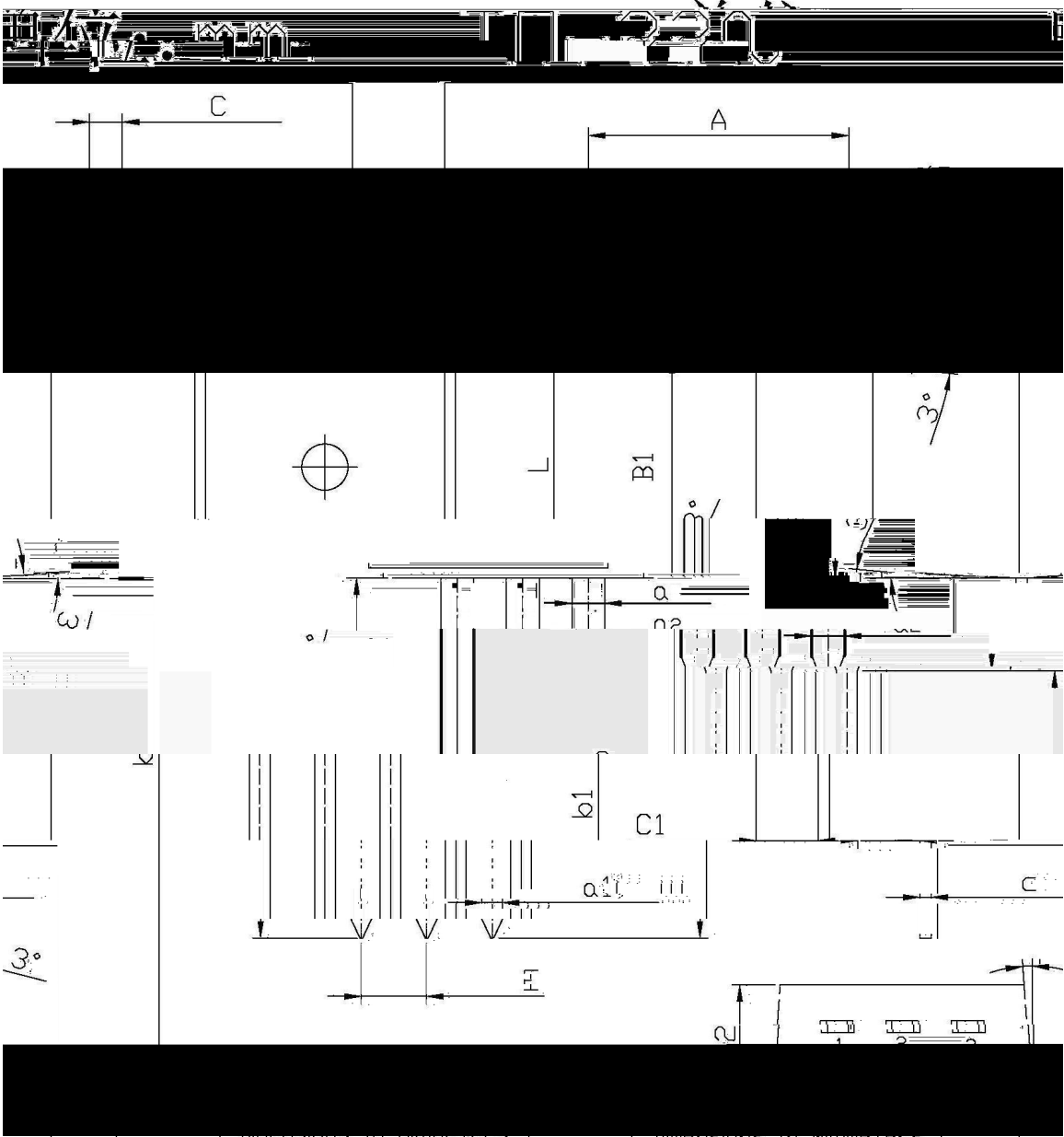
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-5.0V$ $I_C=0$			-1.0	mA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-4.0V$ $I_C=-1.0A$	60			
	$h_{FE(2)}$	$V_{CE}=-4.0V$ $I_C=-3.0A$	40		200	
	$h_{FE(3)}$	$V_{CE}=-4.0V$ $I_C=-5.0A$	15			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_B=-0.3A$ $I_C=-3.0A$			-0.6	V
		$I_B=-1.0A$ $I_C=-5.0A$			-0.6	V
		$I_B=-1.6A$ $I_C=-8.0A$			-1.0	V
Base to Emitter Voltage	V_{BE}	$V_{CE}=-4.0V$ $I_C=-5.0A$			-1.4	V

/ Electrical Characteristic Curve

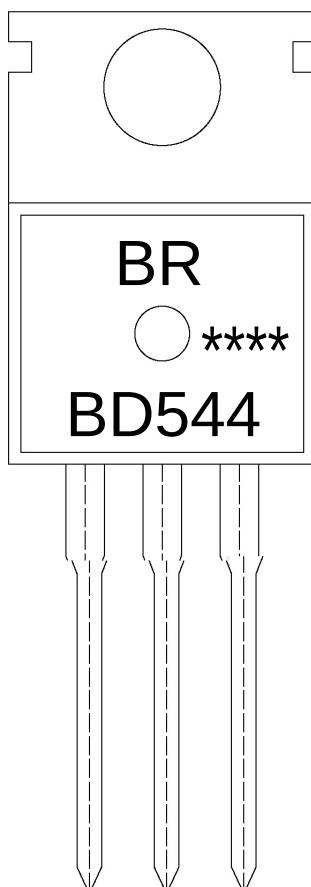


/ Package Dimensions



Dimensions in Millimeters			Dimensions in Millimeters		
Symbol	Min	Max	Symbol	Min	Max
A	9.8	10.2	C	1.2	1.4
B	3.56	3.54	C1	6.3	6.7
H	9.4	15.7	B1	16.1	9.0
L	22.2	22.0		12.6	13.0

/ Marking Instructions



BR

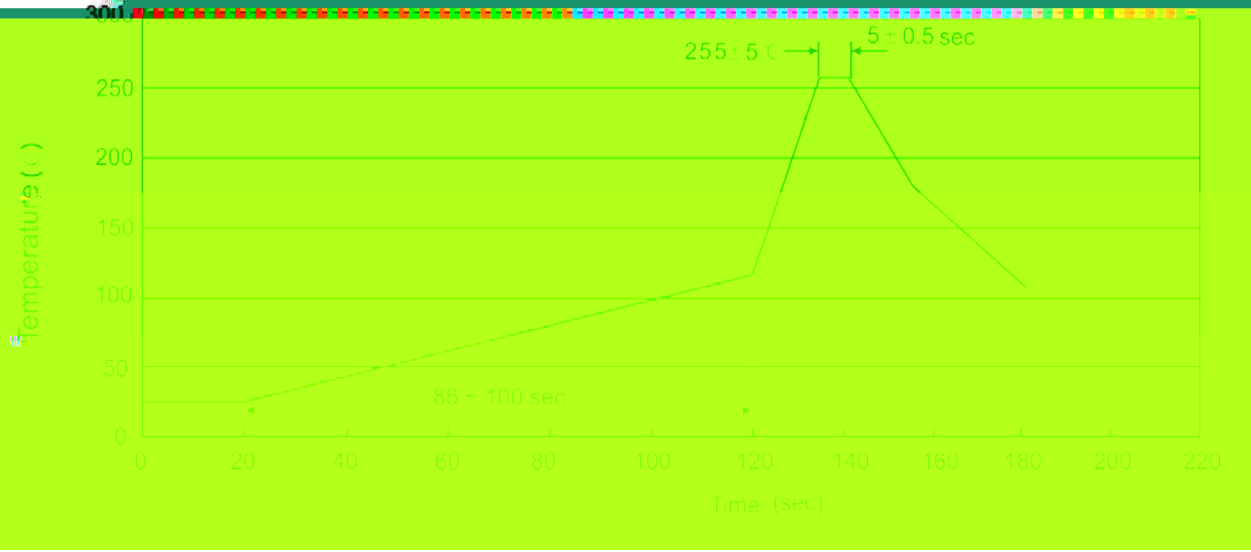
BD544

Note:

BR: Company Code

BD544: Product Type.

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



- Note:
1.Preheating:25~150 , Time:60~90sec.
2.Peak Temp.:255±5 , Duration:5±0.5sec.
- | | | | | |
|---|-------|-----|-----------|--------|
| 1 | 25 | 150 | 60 | 90sec; |
| 2 | 255±5 | | 5±0.5sec; | |
| 3 | | | | |