

BD544

Rev. H Oct.-2018

/ Descriptions

Silicon PNP transistor in a TO-220 Plastic Package.

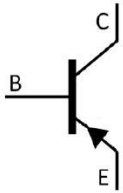
/ Features

High I_C , high P_C , complement to BD543.

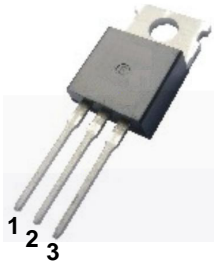
/ Applications

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(Ta=25)

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)	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		

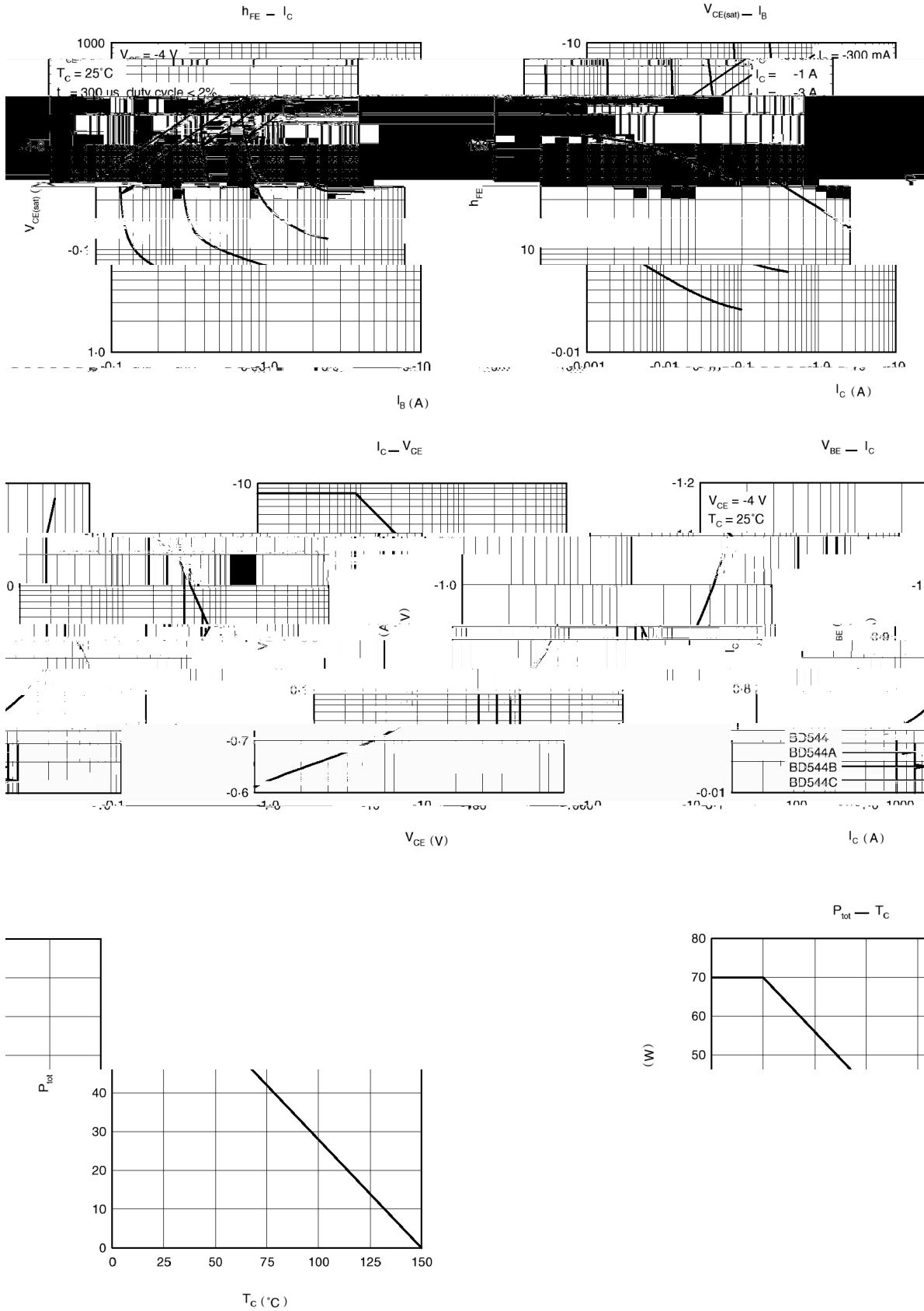
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V _{CEO}	I _C =-30mA I _B =0	BD544	-40		V
			BD544A	-60		
			BD544B	-80		
			BD544C	-100		
Collector Cut-Off Current	I _{CEO}	BD544 BD544A	V _{CE} =-30V I _B =0		-0.7	mA
		BD544B BD544C	V _{CE} =-60V I _B =0			
		BD544	V _{CE} =-40V V _{EB} =0			
BD544A	V _{CE} =-60V V _{EB} =0					
BD544B	V _{CE} =-80V V _{EB} =0					
BD544C	V _{CE} =-100V 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

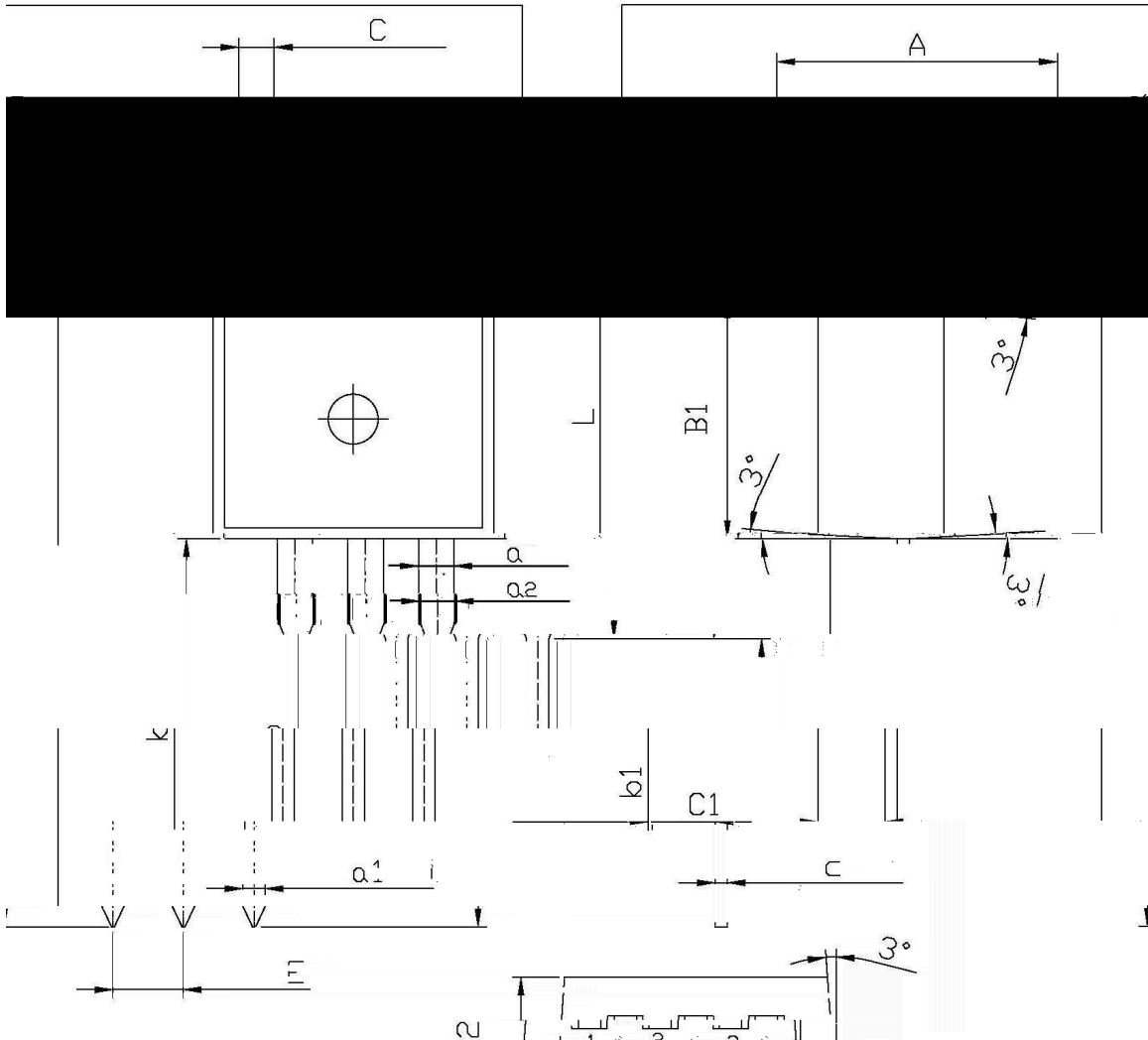
/ Electrical Characteristic Curve



/ Package Dimensions

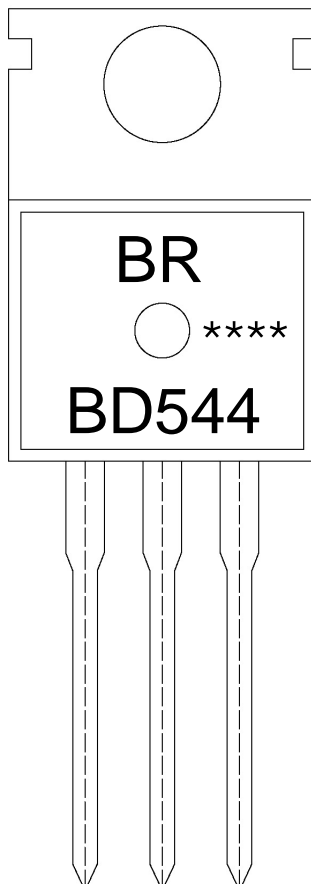
单位: mm

T0-220



Symbol	Dimensions in Millimeters		Symbol	Dimensions in Millimeters	
	Min	Max		Min	Max
A	10.2	14.0	C	1.2	1.4
B	6.3	6.7	B1	9.0	9.4
C1	2.2	2.6	a	1.22	
a	1.22		E	2.3	
C2	4.3	4.7		0.2	1.25

/ Marking Instructions

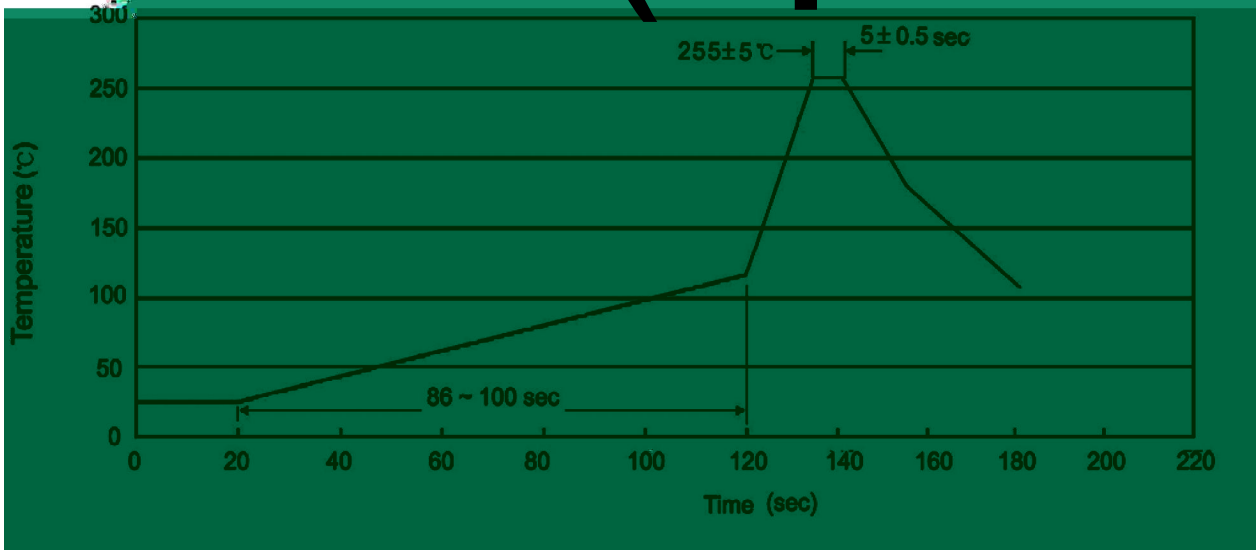


Note:

BR: Company Code

BD544: 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 | | | |