

/ Descriptions

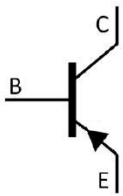
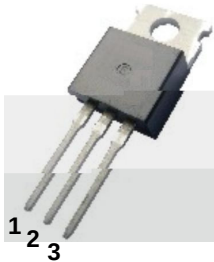
Silicon PNP transistor in a TO-220 Plastic Package.

/ 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 °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	

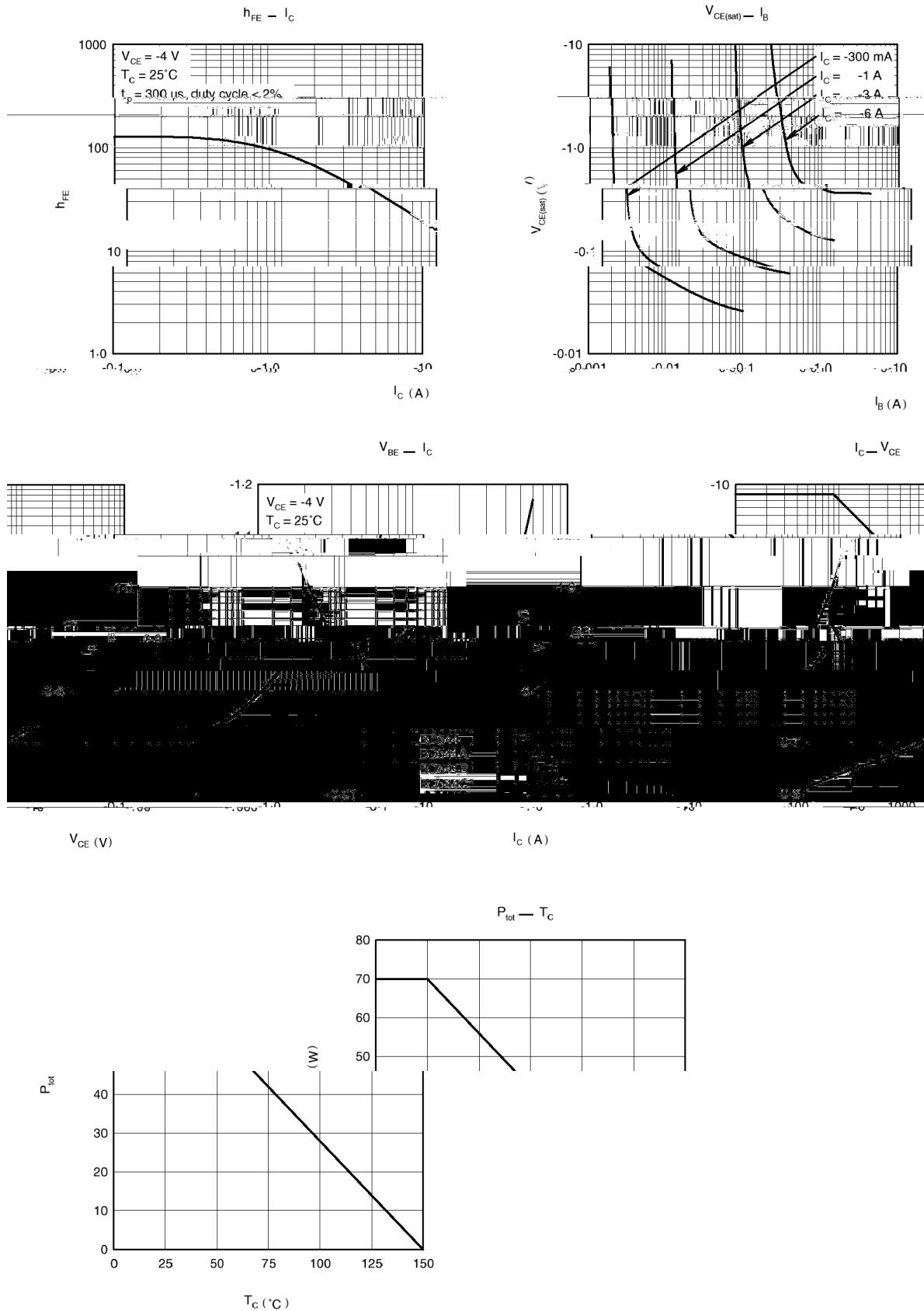
/ Electrical Characteristics(Ta=25)

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

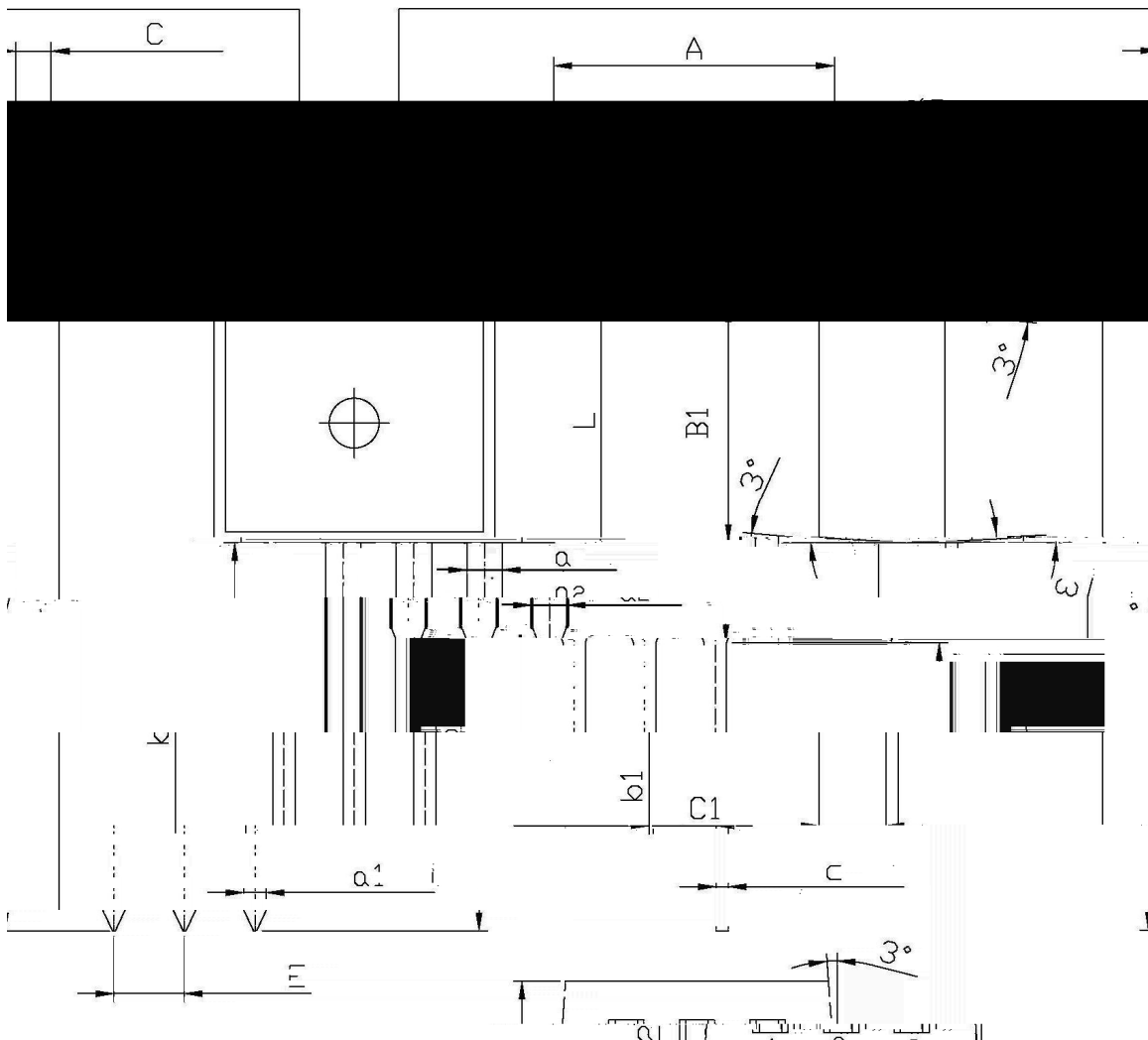
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-5.0V$ $I_C=0$			-1.0	mA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-4.0V$ $I_C=-1.0A$	60			
	$h_{FE(2)}$	$V_{CE}=-4.0V$ $I_C=-3.0A$	40		200	
	$h_{FE(3)}$	$V_{CE}=-4.0V$ $I_C=-5.0A$	15			
Collector to Emitter Saturation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



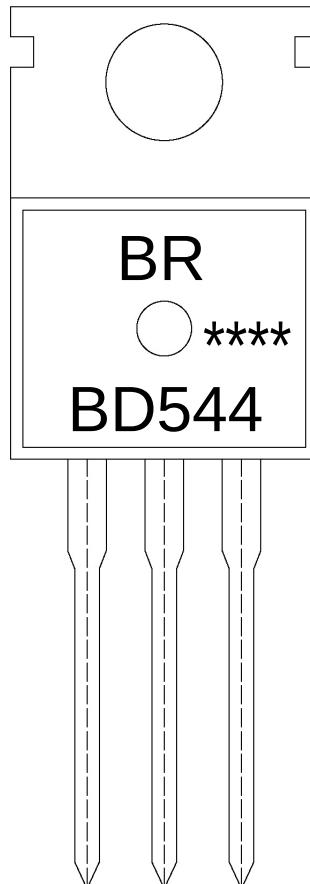
/ Package Dimensions

单位: mm TO-220 单



Symbol	Dimensions in Millimeters		Symbol	Dimensions in Millimeters	
	Min	Max		Min	Max
A	9.8	10.2	C	1.2	1.4
B	6.3	6.7	B1	0.9	0.94
a	1.22	1.32	C1	0.4	0.6
b1	0.96	1.06	a1	1.25	1.45
C1	0.4	0.6			
a1	1.25	1.45			

/ Marking Instructions



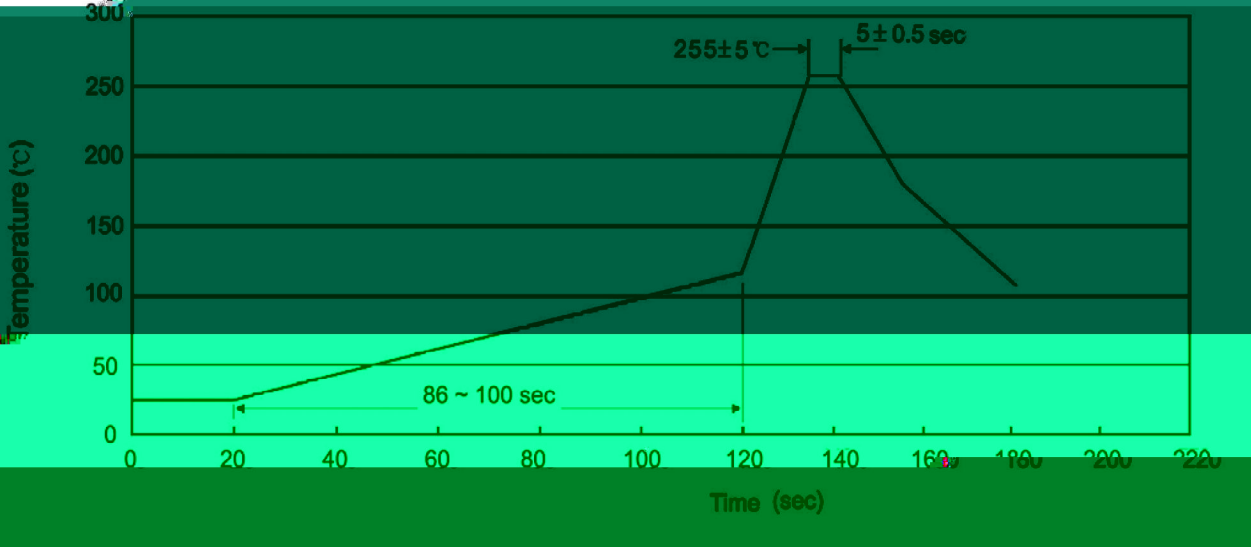
Note:

BR: Company Code

BD544: Product Type.

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

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



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 | | | | | |