

/ Descriptions

TO-220 NPN Silicon NPN transistor in a TO-220 Plastic Package.

/ Features

2SA1010

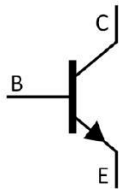
Low $V_{CE(sat)}$, fast switching speed, complementary pair with 2SA1010.

/ Applications

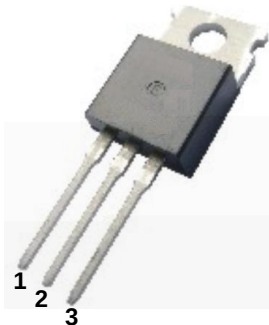
DC/DC

Use for high voltage high speed switching, for a drive in devices such as switching regulators, DC/DC converters, high frequency power amplifiers.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

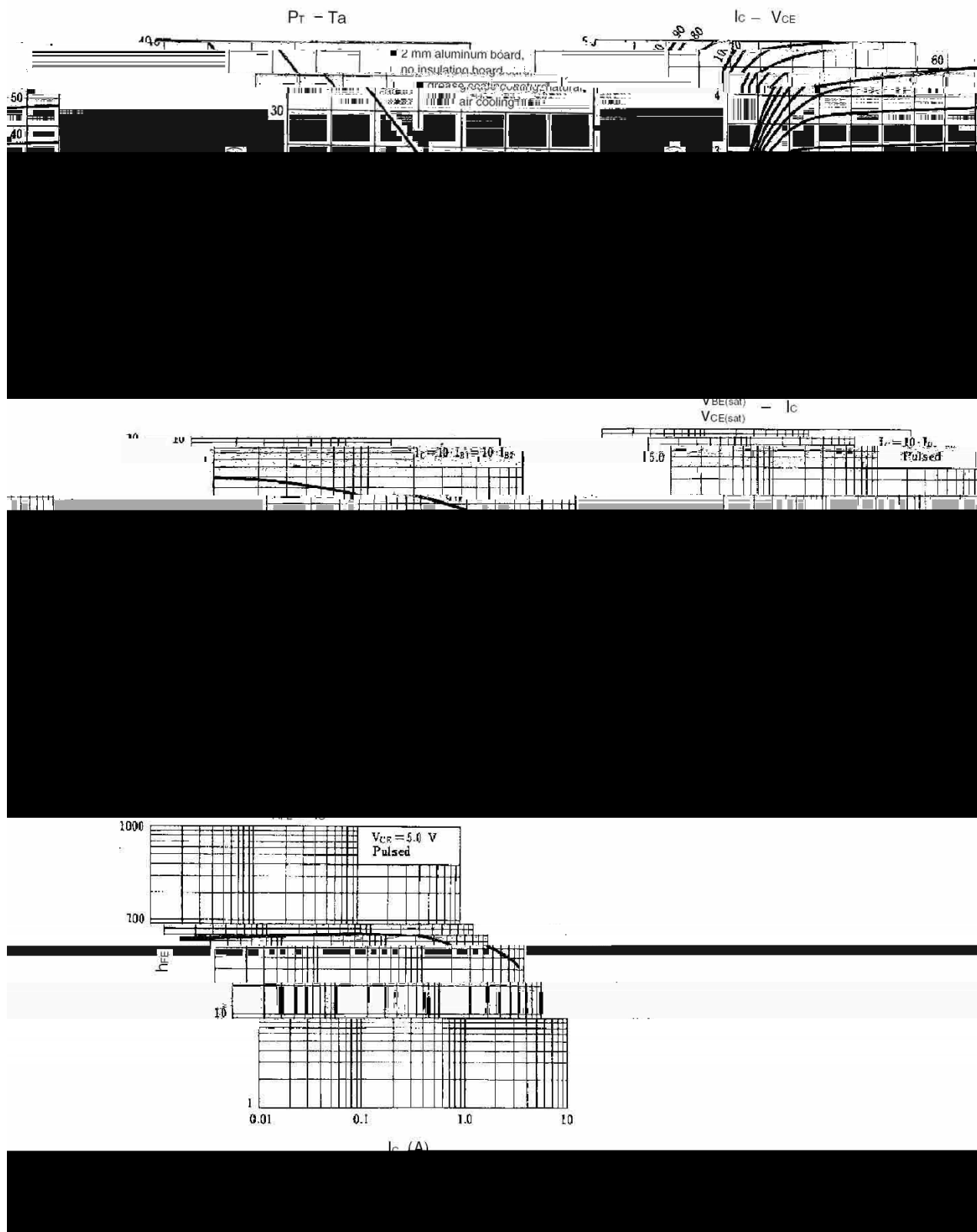
h_{FE} Classifications Symbol	M	L	K
h_{FE} Range	40 80	60 120	100 200

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	150	V
Collector to Emitter Voltage	V_{CEO}	100	V
Emitter to Base Voltage	V_{EBO}	7.0	V
Collector Current - Continuous	I_C	7.0	A
Peak Collector Current*	$*I_{CM}$	15	A
Base Current - Continuous	I_B	3.5	A
Collector Power Dissipation	P_C	1.5	W
	$P_C(T_C=25^\circ\text{C})$	40	W
Junction Temperature	T_J	150	
Storage Temperature Range	T_{stg}	-55 ~ 150	

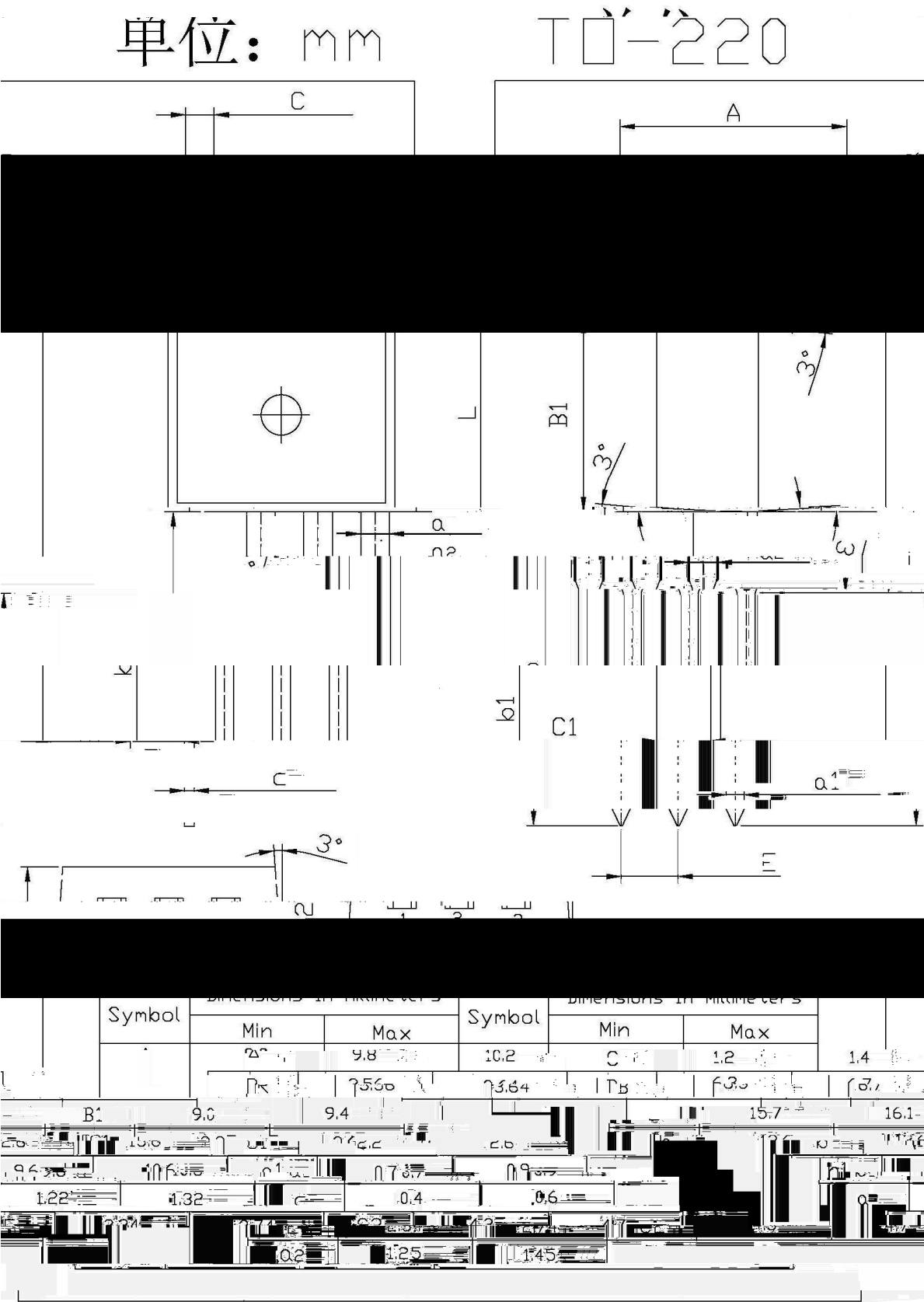
*:pw() $\leq 300\mu\text{s}$,duty cycle() $\leq 10\%$.

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=0.06\text{W}$ nBT1 0 TDs,d55.98 365.3003-0.4800.7 3.5 0 ns P 11.64 r29				

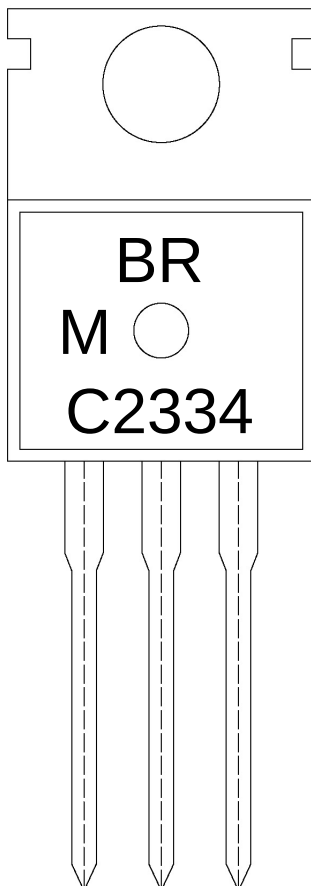
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

C2334

M: h_{FE}

Note:

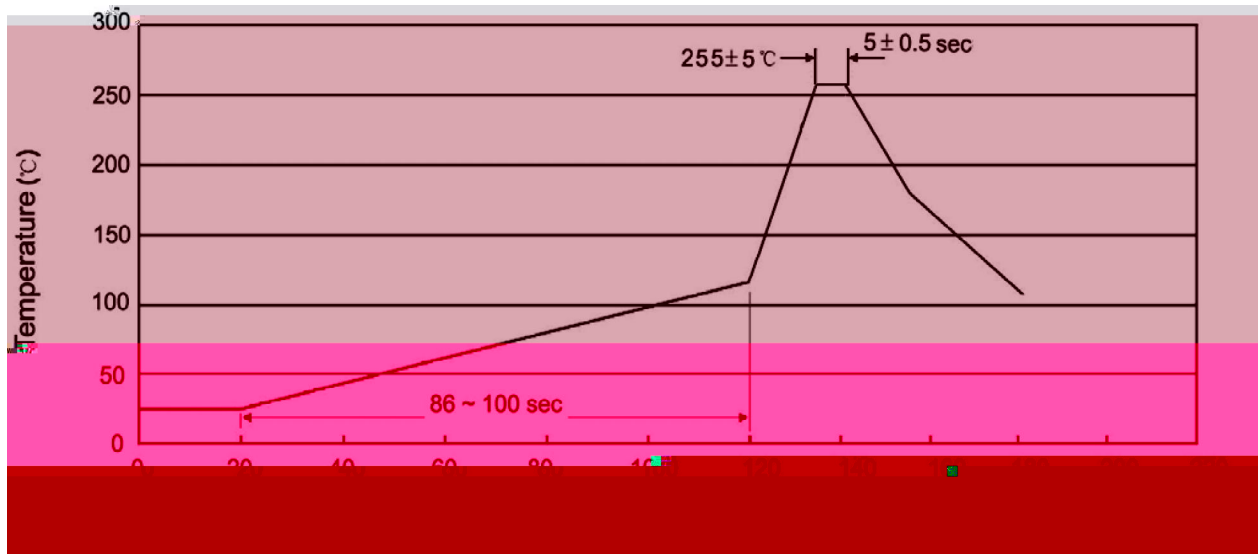
BR: Company Code

C2334: Product Type.

M: h_{FE} Classifications Symbol

****: 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 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

270±5 10±1 sec. Temp.:270±5 Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type	Units					Dimension (unit mm ³)		

/ TUBE

Package Type	Units					Dimension (unit mm ³)		

/ Notices