

/ Descriptions

Silicon NPN transistor in a TO-220 Plastic Package.

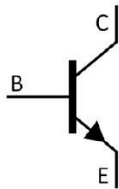
/ Features

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

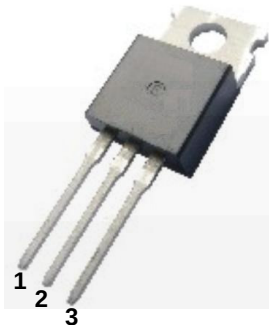
/ Applications

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

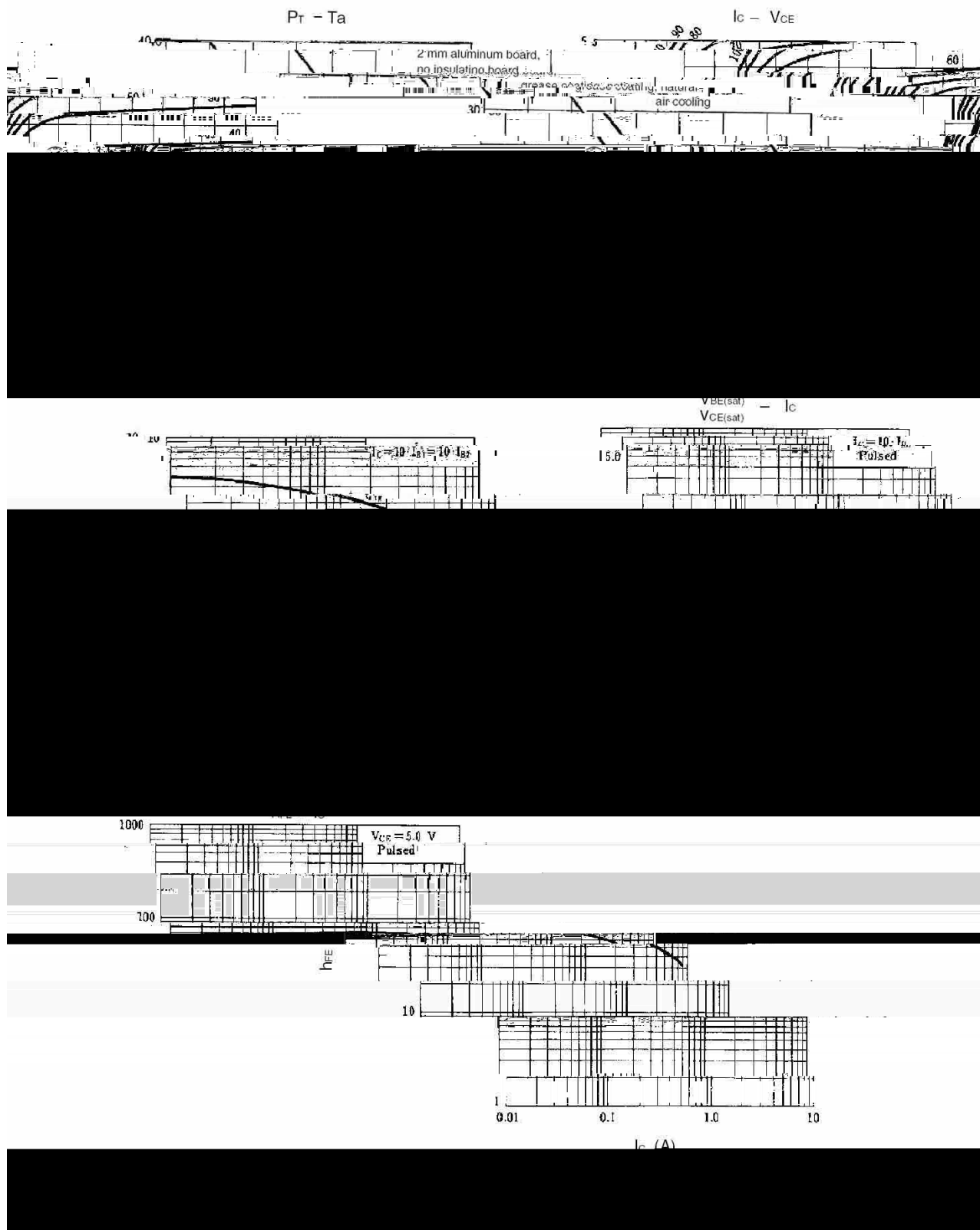
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	150	V
Collector to Emitter Voltage	V_{CEO}	100	V
Emitter to Base Voltage	V_{EBO}	7.0	V
Collector Current - Continuous	I_C	7.0	A
Peak Collector Current*	$*I_{CM}$	15	A
Base Current - Continuous	I_B	3.5	A
Collector Power Dissipation	P_C	1.5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

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

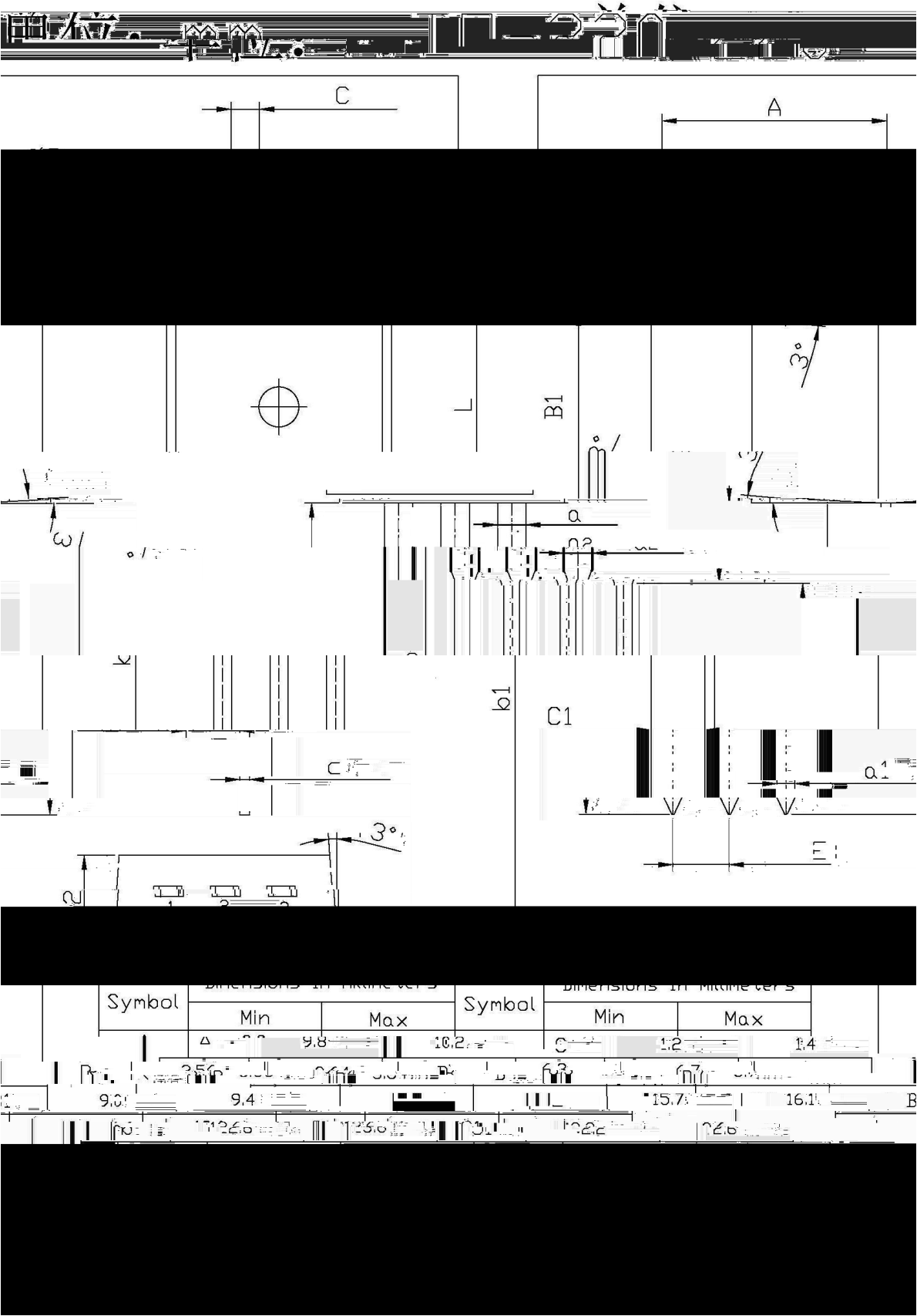
Symbol	Test Conditions	Min	Typ	Max	Unit
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I_C DC $V_{CE} = 10V$, $T_C = 25^\circ C$, $f = 1kHz$, $R_L = 100\Omega$, $V_{BE} = 0.7V$, $P_C = 1.5W$, $T_J = 150^\circ C$

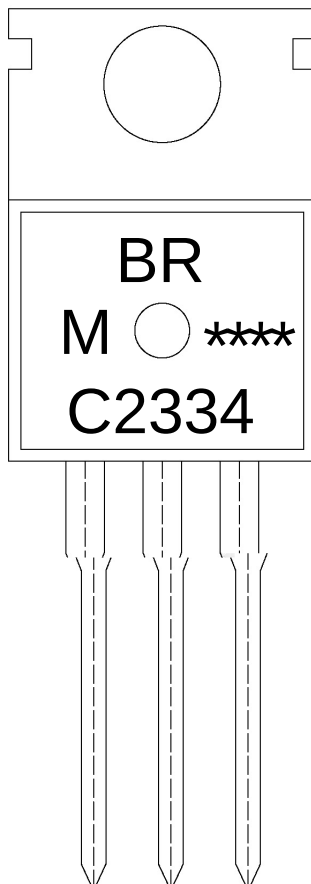
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

C2334

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)		
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box