

/ Descriptions

Silicon PNP transistor in a TO-220 Plastic Package.

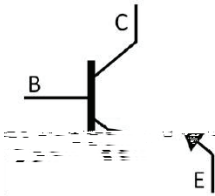
/ Features

Low $V_{CE(sat)}$, fast switching speed, complementary pair with 2SC2334.

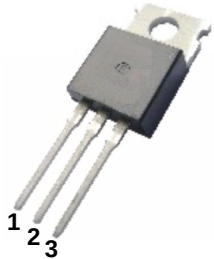
/ Applications

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

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-100	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
	$P_C(T_C=25)$	40	W
Junction Temperature	T_J	150	
Storage Temperature Range	T_{stg}	-55~150	

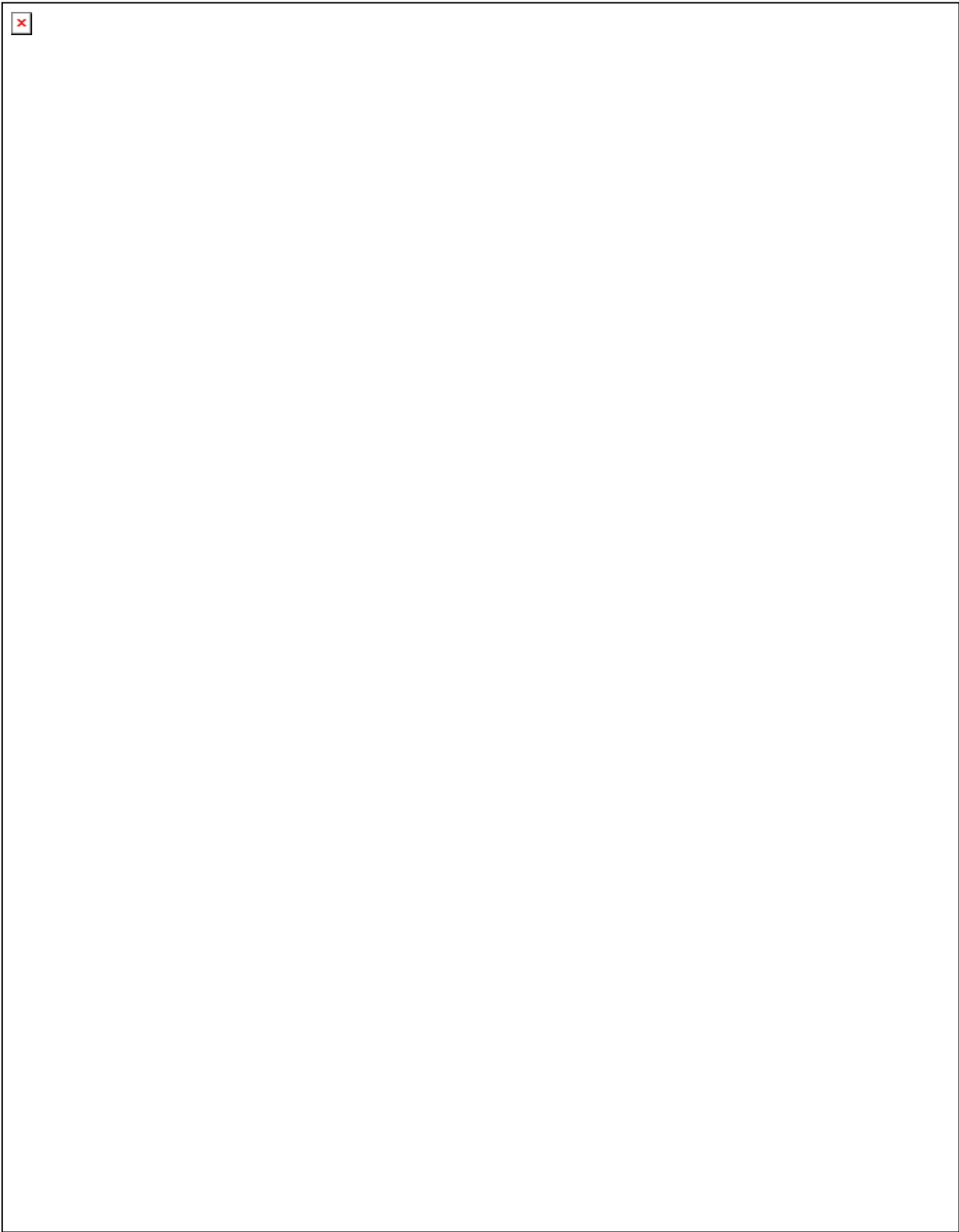
*:pw(脉宽) $\leq 300\mu s$, duty cycle(占空比) $\leq 10\%$.

/ Electrical Characteristics(Ta=25)

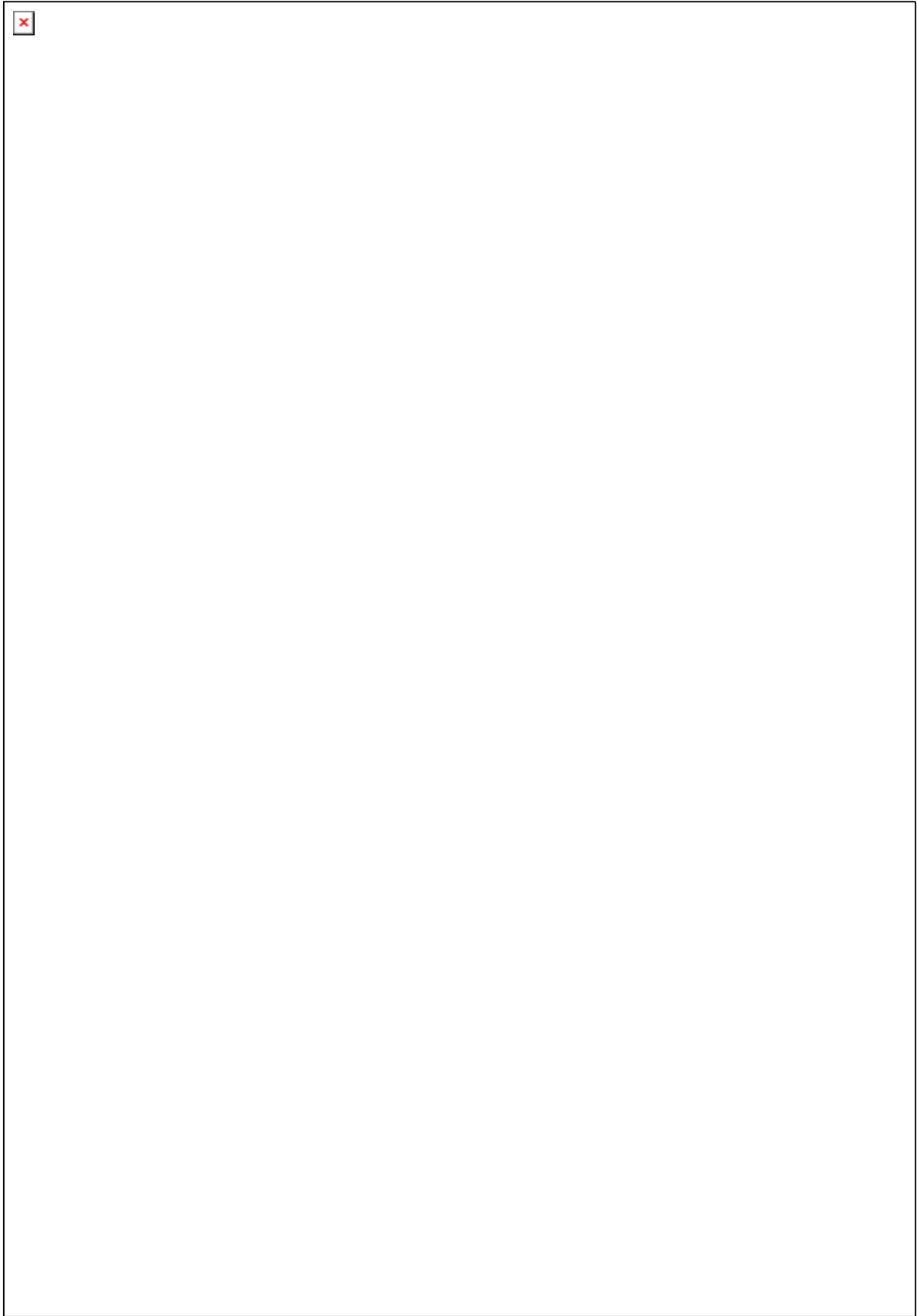
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-10mA$ $I_B=0$	-100			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-100V$ $I_E=0$			-10	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-5.0V$ $I_C=0$			-10	μA
DC Current Gain	$*h_{FE(1)}$	$V_{CE}=-5.0V$ $I_C=-3.0A$	40		200	
	$*h_{FE(2)}$	$V_{CE}=-5.0V$ $I_C=-0.5A$	40		200	
	$*h_{FE(3)}$	$V_{CE}=-5.0V$ $I_C=-5.0A$	20			
Collector to Emitter Saturation Voltage*	$*V_{CE(sat)}$	$I_C=-5.0A$ $I_B=-0.5A$			-0.6	V
Base to Emitter Saturation Voltage*	$*V_{BE(sat)}$	$I_C=-5.0A$ $I_B=-0.5A$			-1.5	V
Turn-On Time	t_{on}	$I_C=-5.0A$ $V_{CC}=-50V$ $RL=10\Omega$ $I_{B1}=-I_{B2}=-0.5A$			0.5	μs
Storage Time	t_{stg}				1.5	μs
Turn-Off Time	t_f				0.5	μs

*:pw(脉宽) $\leq 350\mu s$, duty cycle(占空比) $\leq 2\%$.

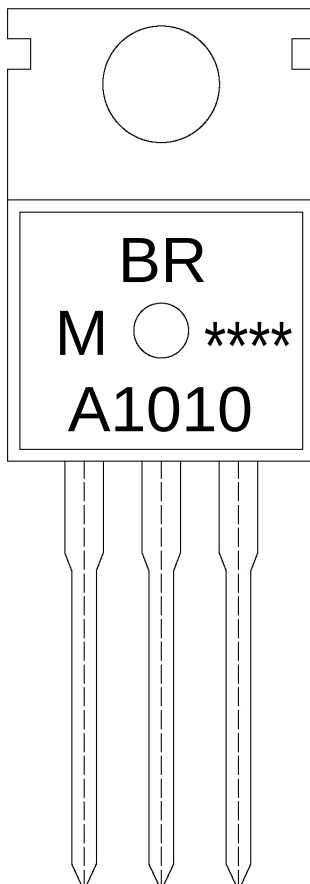
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

A1010

M

h_{FE}

Note:

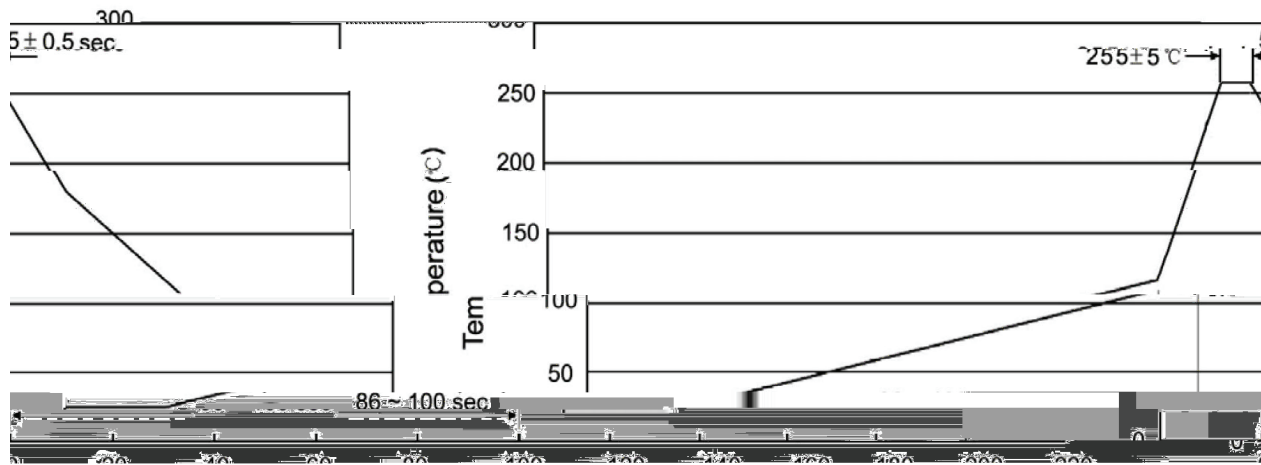
BR: Company Code

A1010: 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;
- 2

255 5

5 0.5sec;
- 3

2 10

/sec.
- 1.Preheating:25~150

, Time:60~90sec.
- 2.Peak Temp.:255 5

, Duration:5 0.5sec.
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 包装数量		Dimension 包装尺寸 (unit: mm ³)
封装形式	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒