2SC1815

Rev.E Nov.-2015

蓝箭电子 BLUE ROCKET ELECTRONICS

DATA SHEET

/ Descriptions

TO-92 NPN Silicon NPN transistor in a TO-92 Plastic Package.

/ Features

, , h_{FE} , , 2SA1015

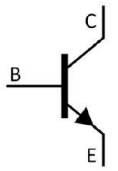
High voltage and high current, excellent h_{FE} linearity ,low noise ,complementary pair with 2SA1015.

/ Applications

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Audio frequency general purpose ,driver stage amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

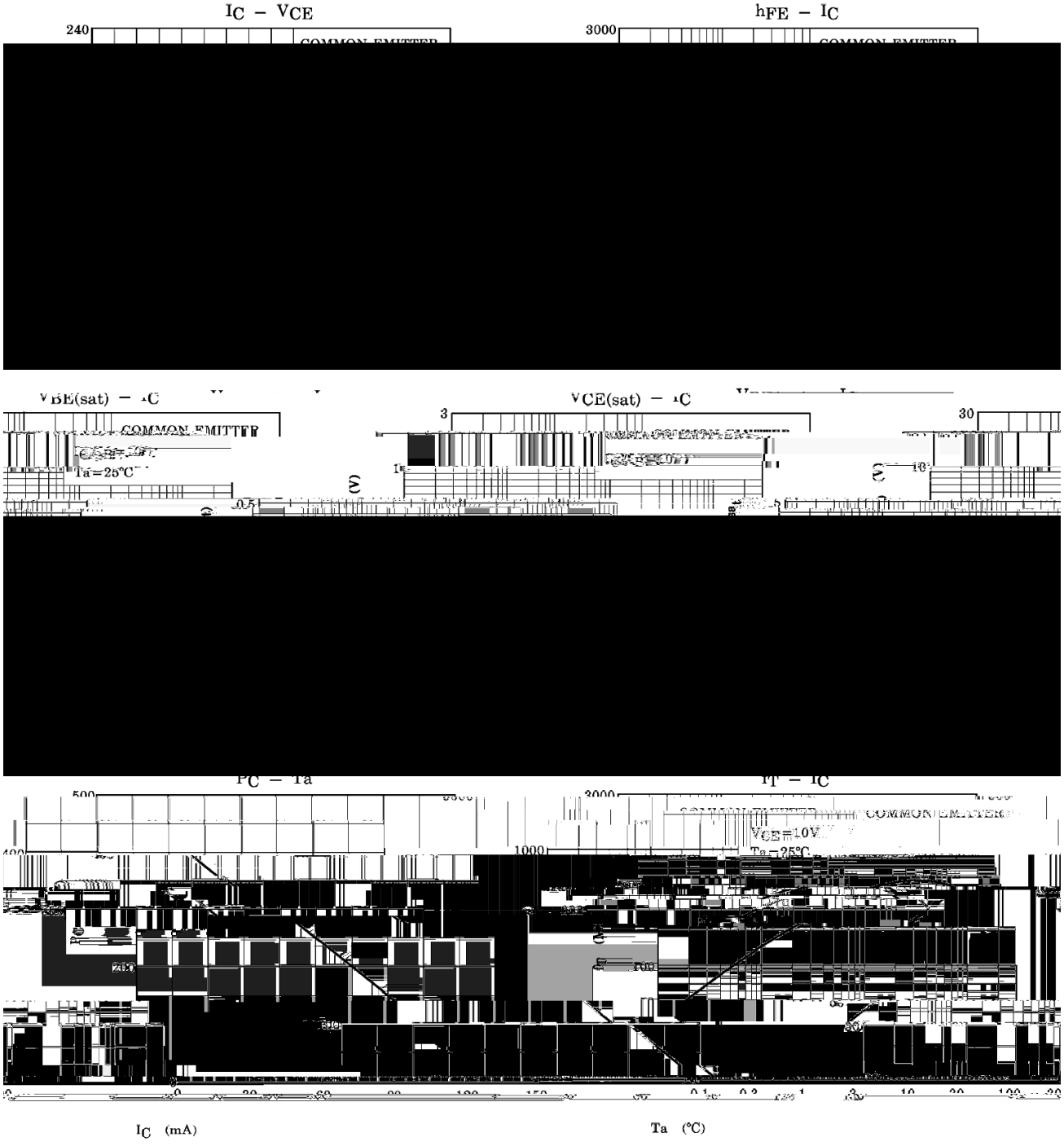
/ hFE Classifications & Marking

h_{FE} Classifications Symbol	O	Y	GR	BL
h_{FE} Range	70~140	120~240	200~400	350~700

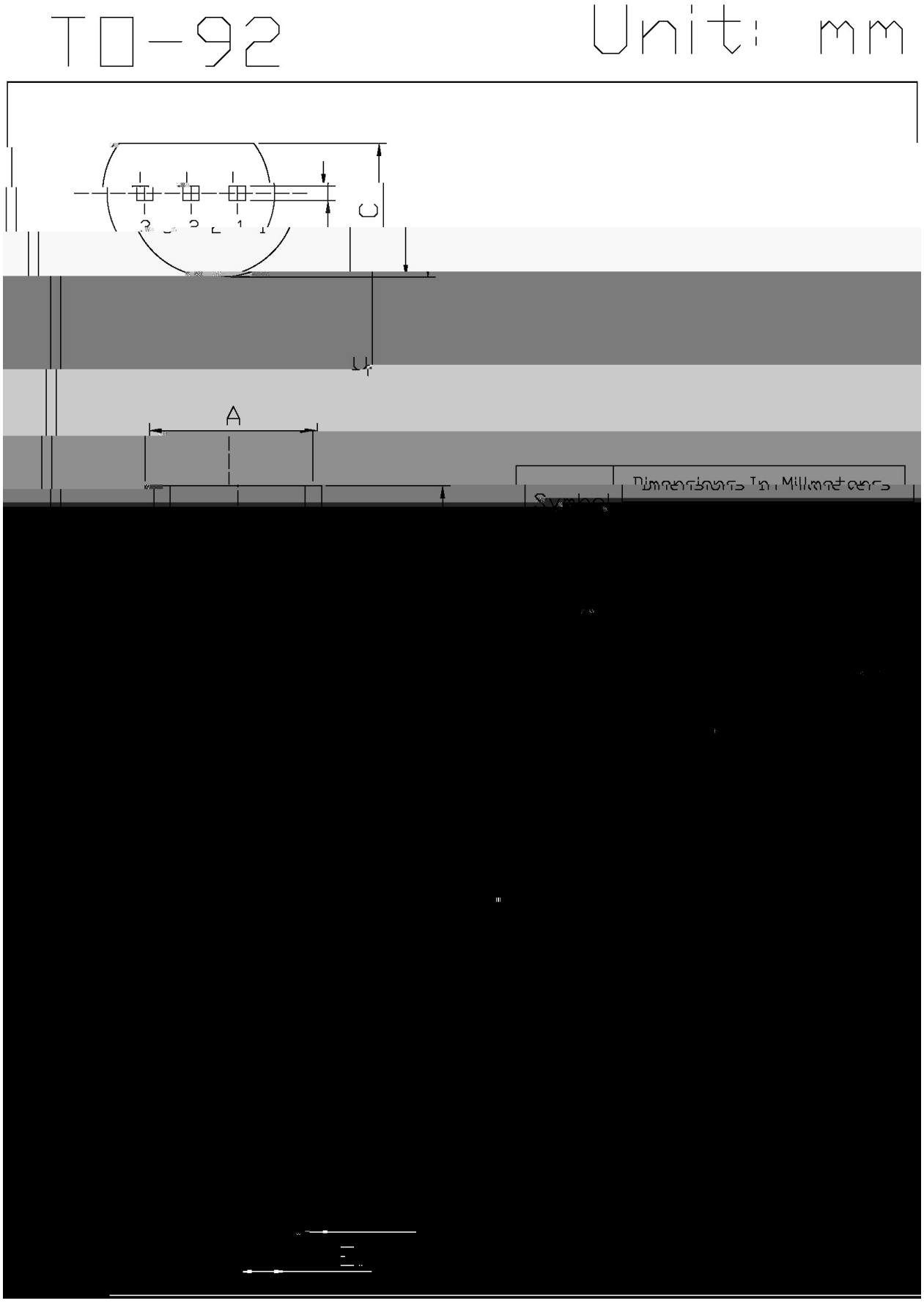
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	50	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	150	mA
Base Current - Continuous	I_B	50	mA
Collector Power Dissipation	P_C	400	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=100 A I_E=0	60			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=500 A I_B=0	50			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=100 A I_C=0	5.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=60V I_E=0			0.1	A
Emitter Cut-Off Current	I_{EBO}	V_{EB}=5.0V I_C=0			0.1	A
DC Current Gain	$h_{FE(1)}$	V_{CE}=6.0V I_C				

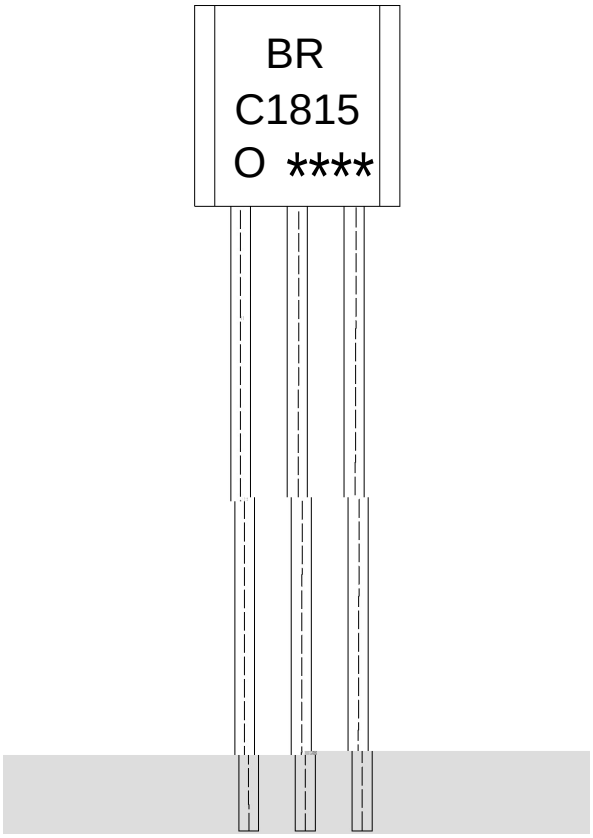
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR:

C1815

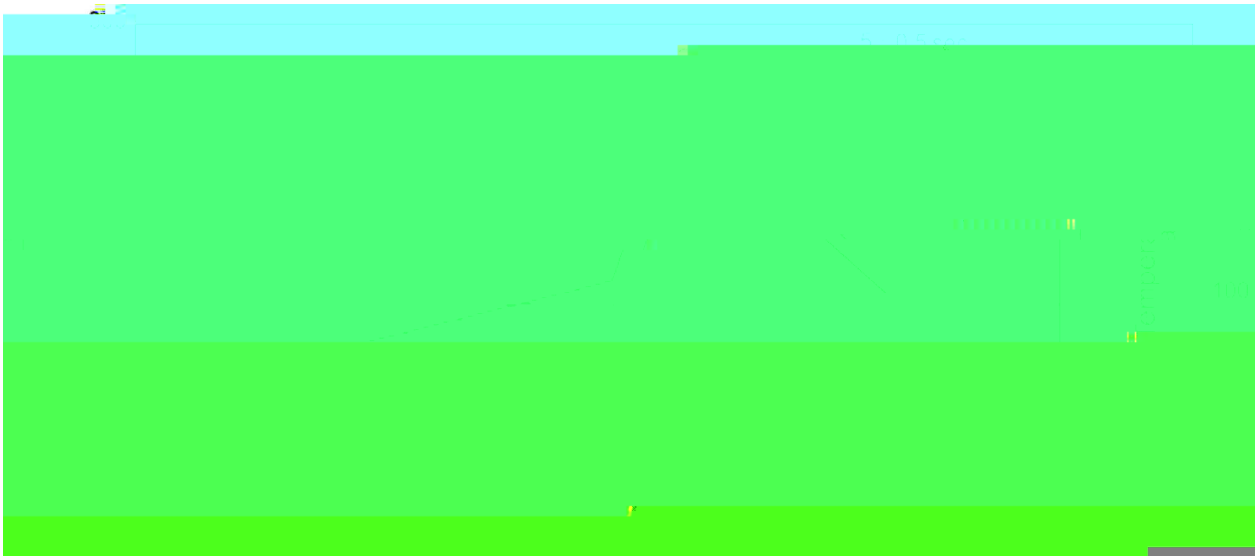
O: h_{FE}

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Note:

BR:	Company Code.
C1815:	Product Type.
O:	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 mm3)
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
TO-92	1,000	10	10,000	5	50,000	135×190	237×172×102	560×245×195
	1,000	10	10,000	10	100,000	135×190	237×172×102	560×245×375