2SC1317

Rev.E Mar.-2016

蓝箭电子 BLUE ROCKET ELECTRONICS

DATA SHEET

/ Descriptions

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

/ Features

$V_{CE(sat)}$, 2SA719

Low $V_{CE(sat)}$,complementary pair with 2SA719.

/ Applications

Audio frequency power amplifier and driver.

/ Equivalent Circuit

/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ hFE Classifications & Marking

h_{FE} Classifications Symbol	Q	R	S
h_{FE} Range	85~170	120~240	170~340

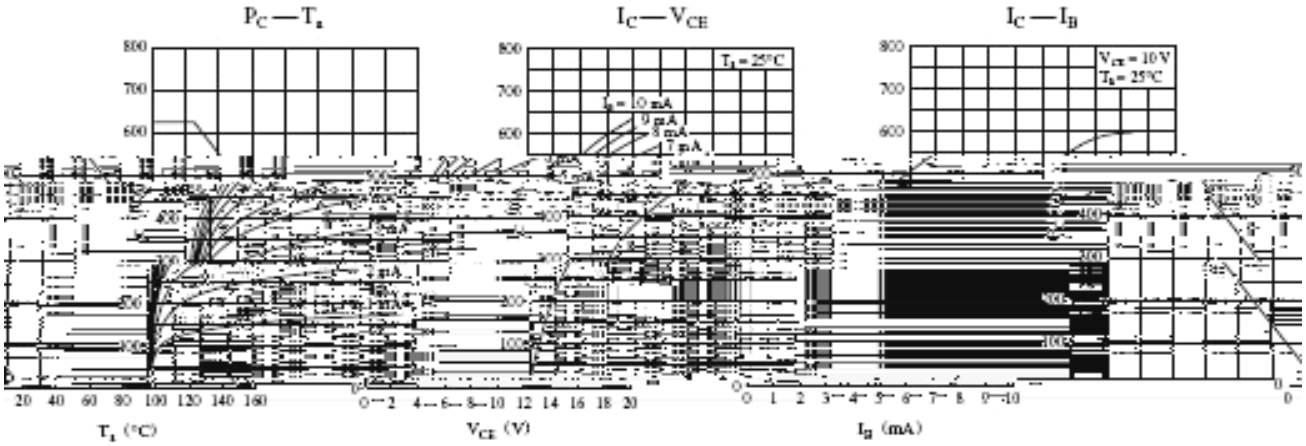
/ Absolute Maximum Ratings(Ta=25)

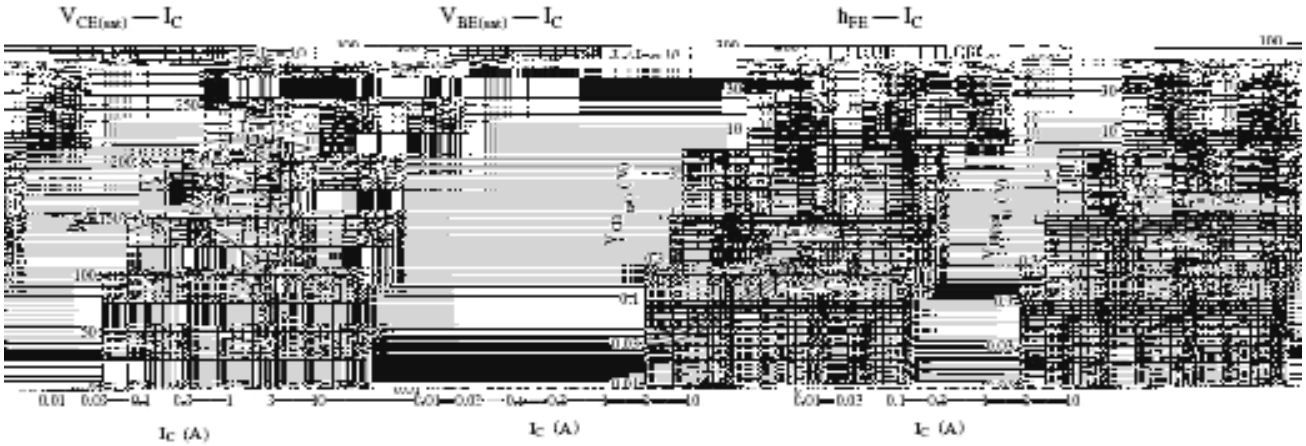
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	30	V
Collector to Emitter Voltage	V_{CEO}	25	V
Emitter to Base Voltage	V_{EBO}	7.0	V
Collector Current - Continuous	I_C	500	mA
Collector Current – Continuous(Pulse)	I_{CP}	1.0	A
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

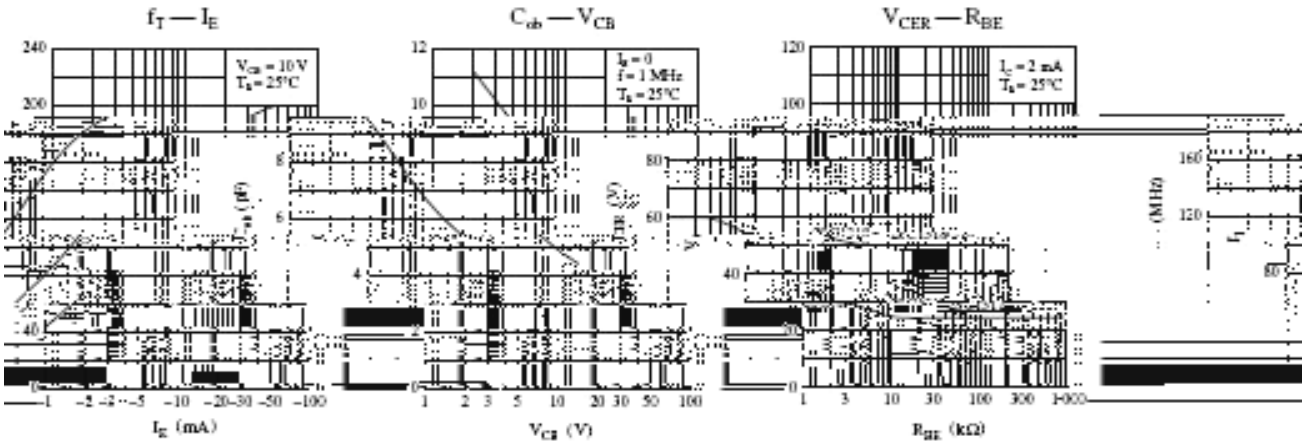
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=10μA I_E=0	30			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=10mA I_B=0	25			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=10μA I_C=0	7.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=20V I_E=0			0.1	μA
DC Current Gain	$h_{FE(1)}$	V_{CE}=10V I_C=150mA	85	160	340	
	$h_{FE(2)}$	V_{CE}=10V I_C=500mA	40	90		
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=300mA I_B=30mA		0.35	0.6	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=300mA I_B=30mA		1.1	1.5	V
Transition Frequency	f_T	V_{CE}=10V I_C=50mA		200		MHz
Collector Output Capacitance	C_{ob}	V_{CB}=10V I_E=0 f=1.0MHz		6.0	15	pF

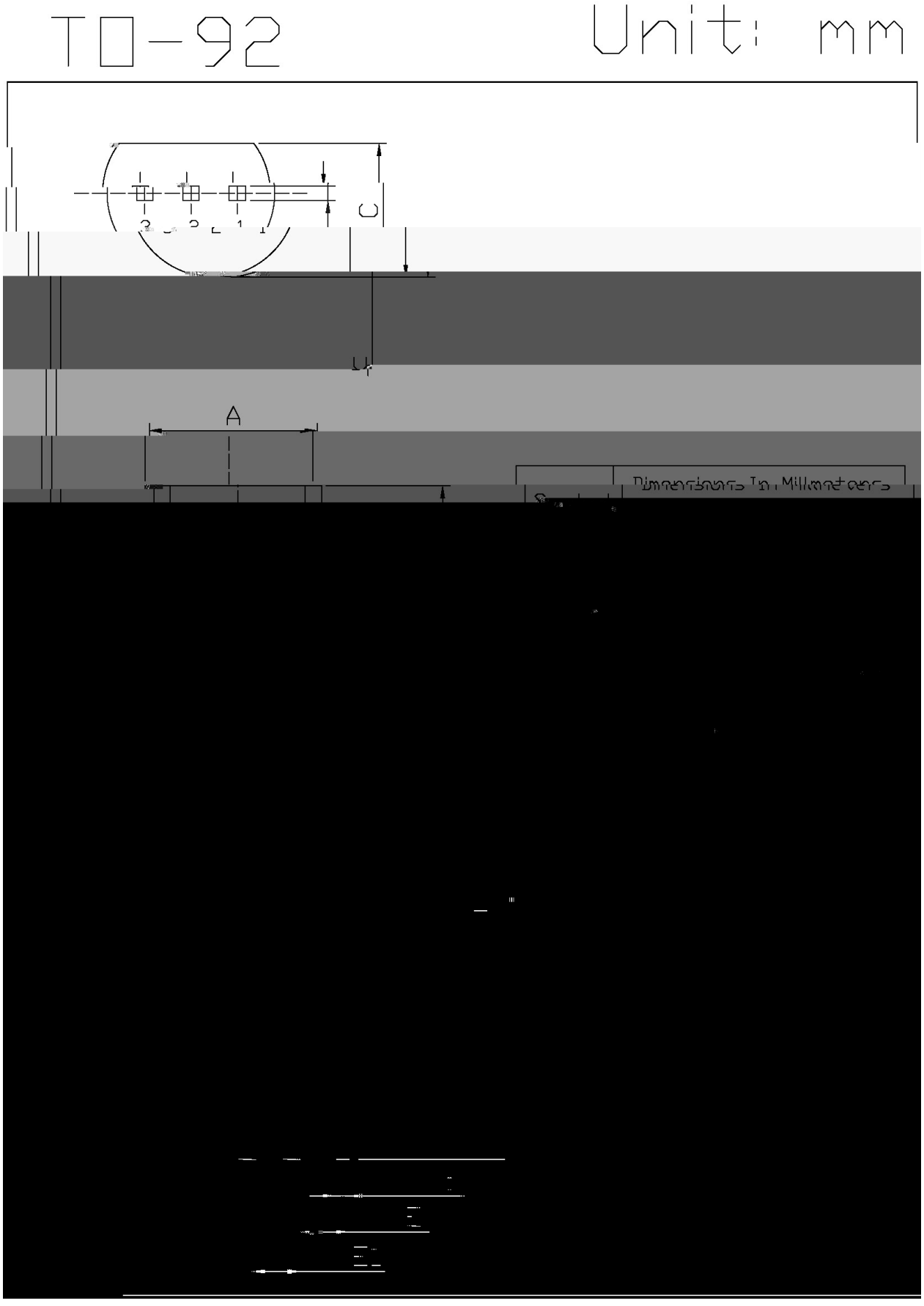
/ Electrical Characteristic Curve



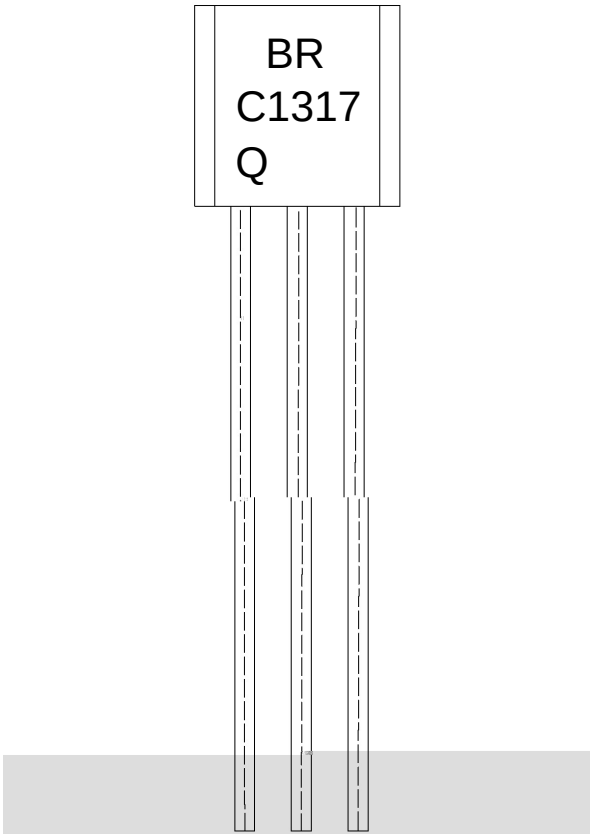




/ Package Dimensions



/ Marking Instructions



BR:

C1317

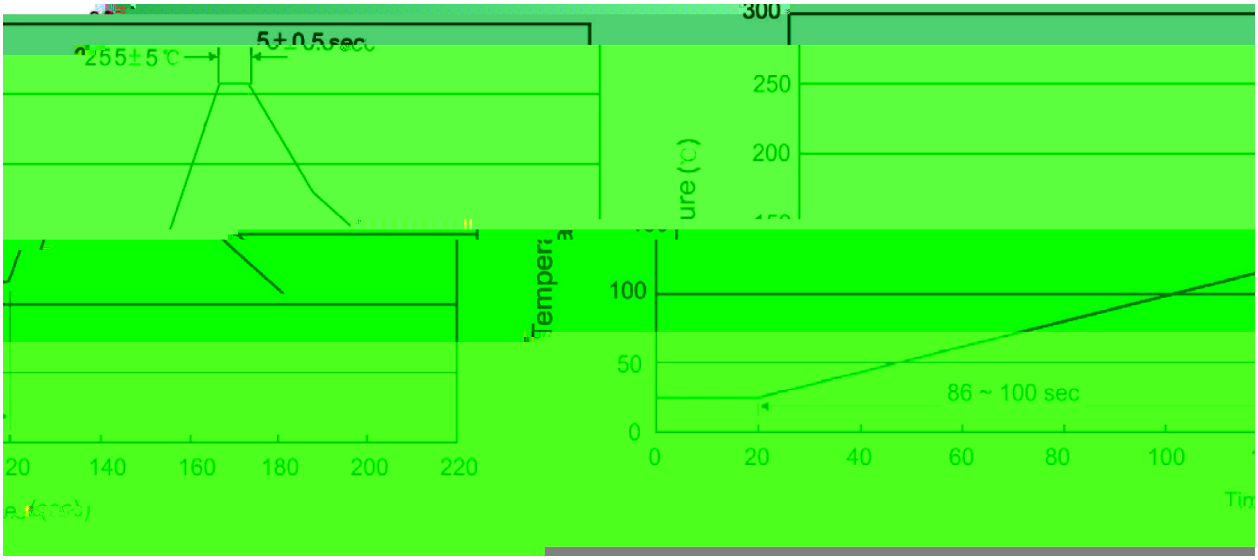
Q: h_{FE}

****

Note:

BR:	Company Code.
C1317:	Product Type.
Q:	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 封装形式	Units 包装数量	Dimension 包装尺寸 (unit: mm3)