2SC2732

Rev.F Apr.-2017

蓝箭电子 BLUE ROCKET ELECTRONICS

DATA SHEET

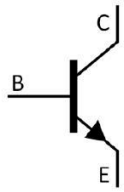
/ Descriptions

SOT-23 NPN Silicon NPN transistor in a SOT-23 Plastic Package.

/ Features

High frequency.

UHF frequency converter.



PIN1 Base PIN 2 Emitter PIN 3 Collector

/ h_{FE} Classifications & Marking

h_{FE} Range	30˙ 200
Marking	HEC

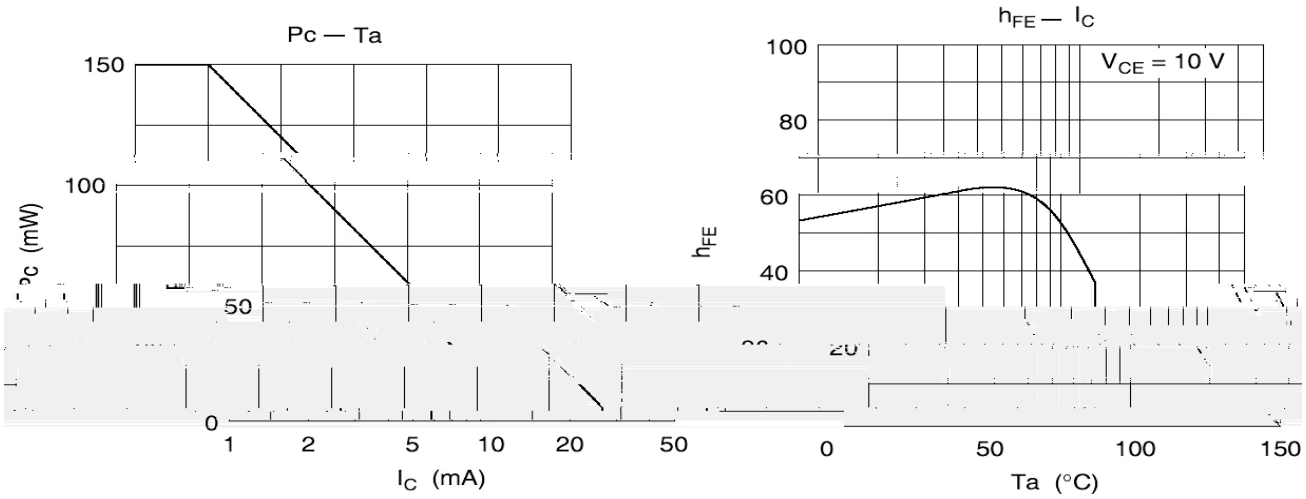
/ Absolute Maximum Ratings(Ta=25)

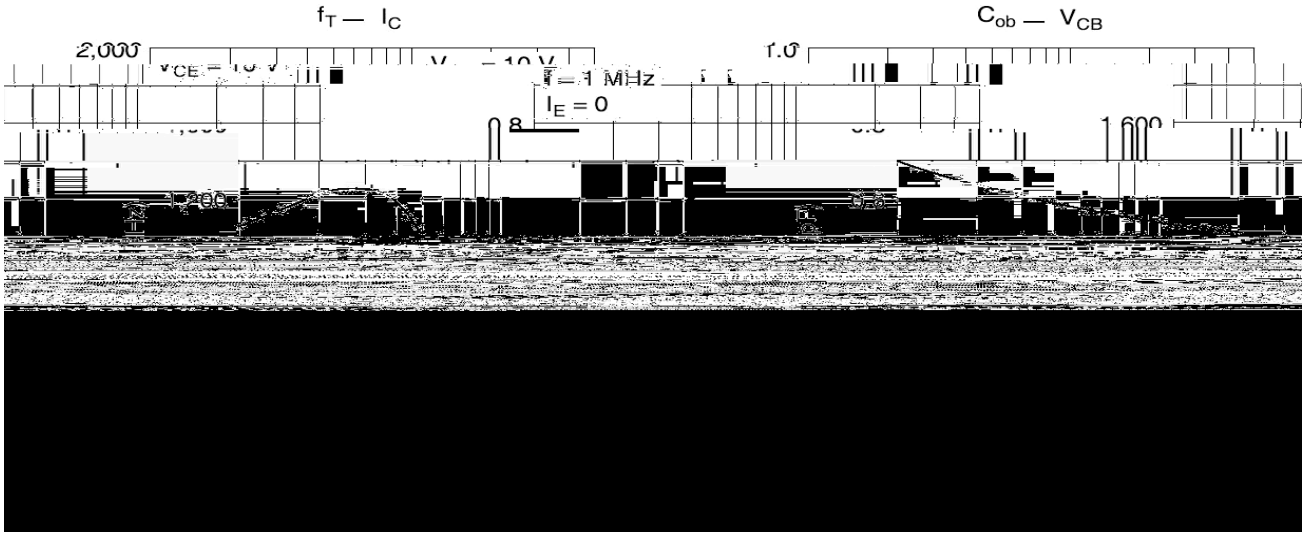
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	30	V
Collector to Emitter Voltage	V_{CEO}	25	V
Emitter to Base Voltage	V_{EBO}	4.0	V
Collector Current	I_C	20	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

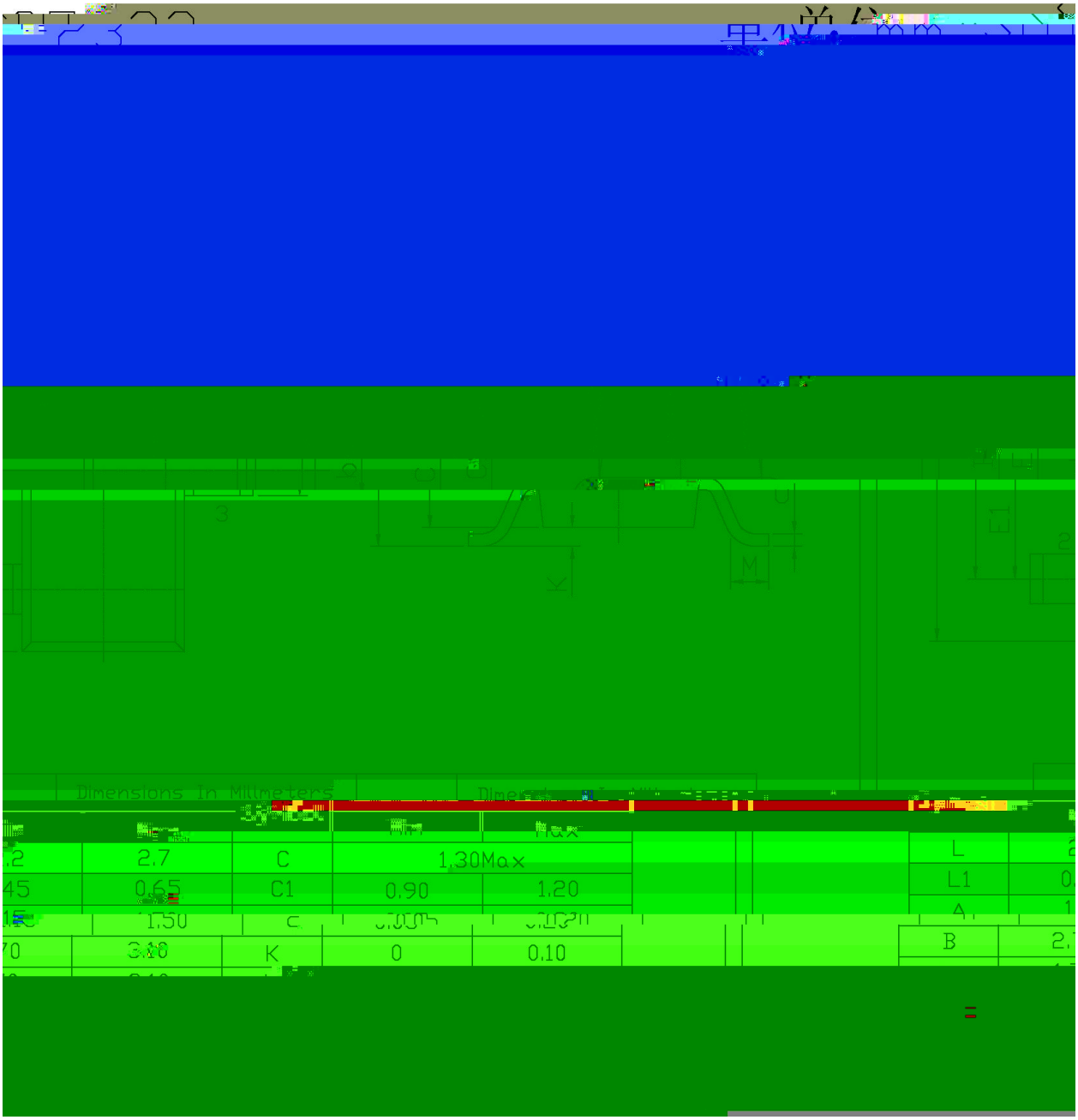
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- Base Breakdown Voltage	V_{CBO}	I_C=10μA I_E=0	30			V
Collector-Emitter Breakdown Voltage	V_{CEO}	I_C=10mA R_{BE}=∞	25			V
Emitter-Base Breakdown Voltage	V_{EBO}	I_E=10μA I_C=0	4.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=10V I_E=0			0.5	μA
DC Current Gain	h_{FE}	V_{CE}=10V I_c=3.0mA	30	60	200	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=10mA I_B=1.0mA			5.0	V
Transition Frequency	f_T	V_{CE}=10V I_C=5.0mA	700	1000		MHz
Collector Output Capacitance	C_{ob}	V_{CE}=10V I_E=0 f=1.0MHz		0.5	0.8	pF
Conversion Gain	CG	V_{CC}=12V I_C=1.0mA f=900MHz f_{OSC}=930MHz(0dBm) f_{out}=30MHz		7.0		dB
Noise Figure	NF	V_{CC}=12V I_C=1.0mA f=900MHz f_{OSC}=930MHz(0dBm) f_{out}=30MHz		10		dB

/ Electrical Characteristic Curve

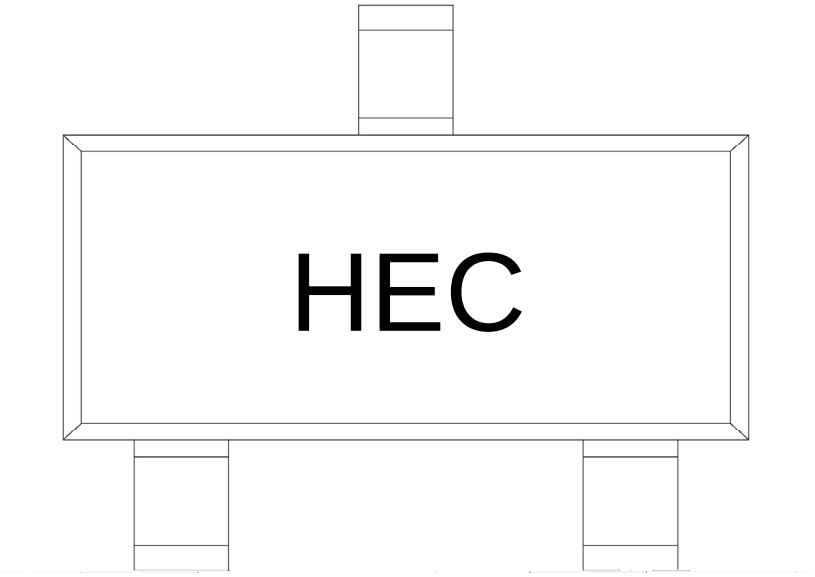




/ Package Dimensions



/ Marking Instructions



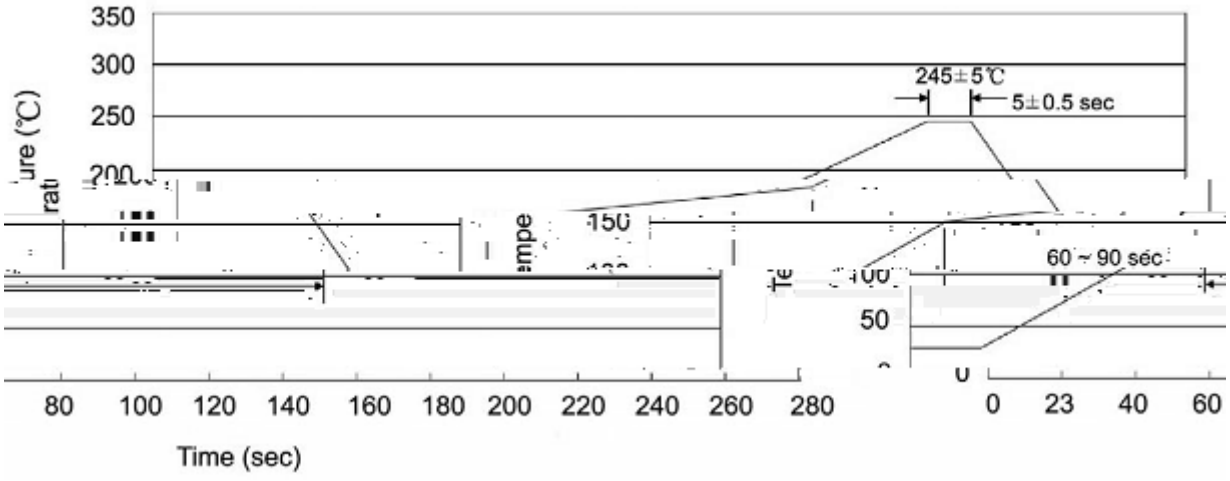
H

EC

Note:

H	Company Code
EC	Product Type Code

( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

1	25 150 60 90sec;	1.Preheating:25~150	, Time:60~90sec.
2	245±5 5±0.5sec;	2.Peak Temp.:245±5	, Duration:5±0.5sec.
3	2 10 /sec.	3. Cooling Speed: 2~10	/sec.

/ Resistance to Soldering Heat Test Conditions

260±5	10±1 sec.	Temp.:260±5	Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension		(unit mm³)
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
SOT-23	3,000	10	30,000	6	180,000	7 ρ ×8	180×120×180	390×385×205