

**Description**

Silicon PNP transistor in a SOT-23 Plastic Package

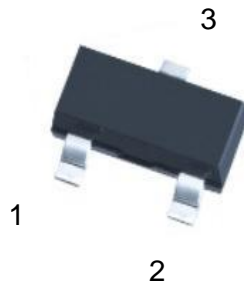
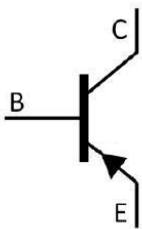
**Features**

- Low current
- Low voltage
- Halogen-free product.

**Applications**

General power amplifier application

Symbol	Parameter	Max	Unit
$V_{CEO}$	collector-emitter voltage	-45	V
$I_c$	collector current (DC)	-100	mA

**Equivalent Circuit & Pinning**


PIN1: Base

PIN 2: Emitter

PIN 3: Collector

**hFE Classifications & Marking**

h <sub>FE</sub> Classifications Symbol	A	B	C
h <sub>FE</sub> Range	125~250	220~475	420~800
Marking	H3E	H3F	H3G

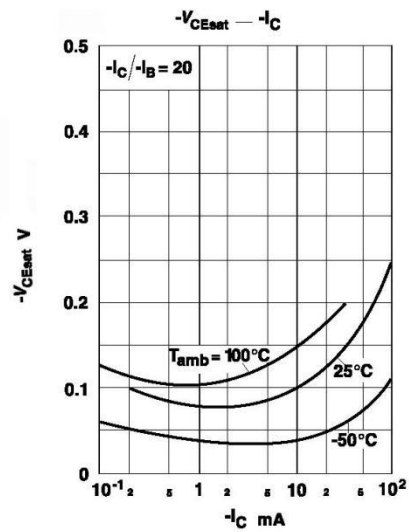
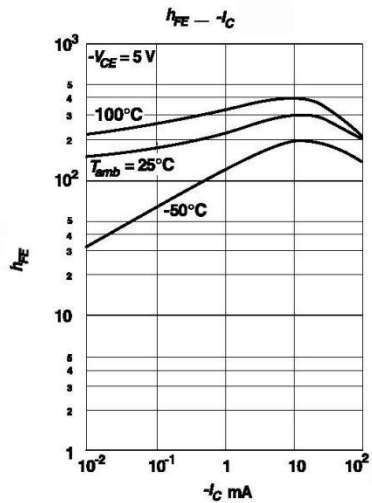
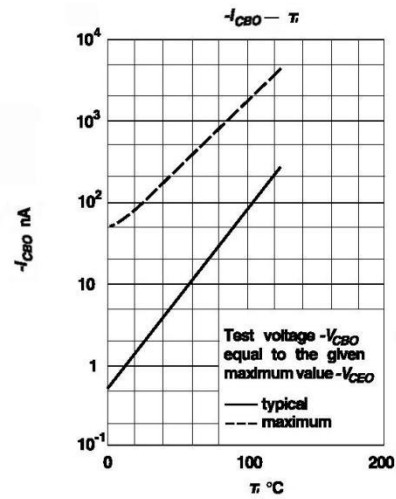
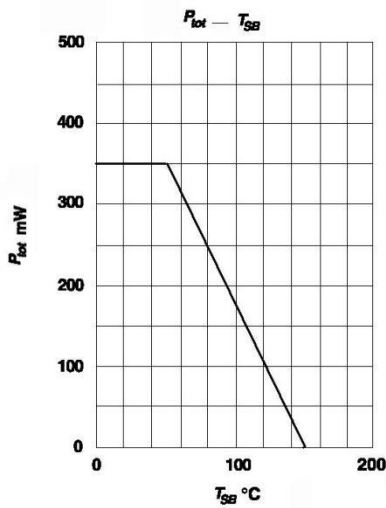
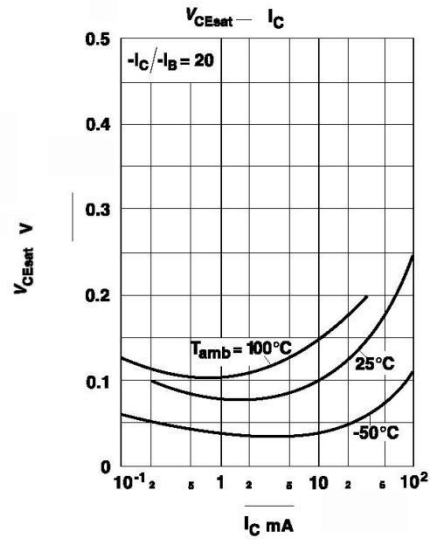
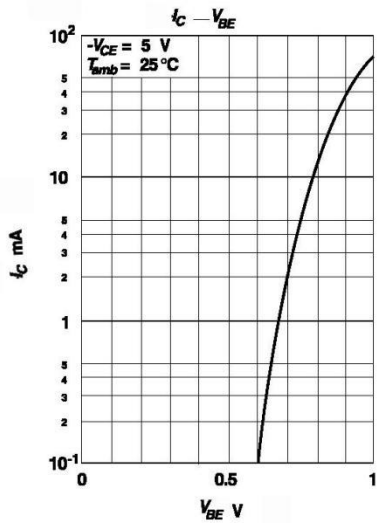
**Absolute Maximum Ratings(Ta=25°C)**

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CB0}$	-50	V
Collector to Emitter Voltage	$V_{CEO}$	-45	V
Emitter to Base Voltage	$V_{EBO}$	-5.0	V
Collector Current - Continuous	$I_C$	-100	mA
Collector Power Dissipation	$P_C$	350	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-55~150	°C

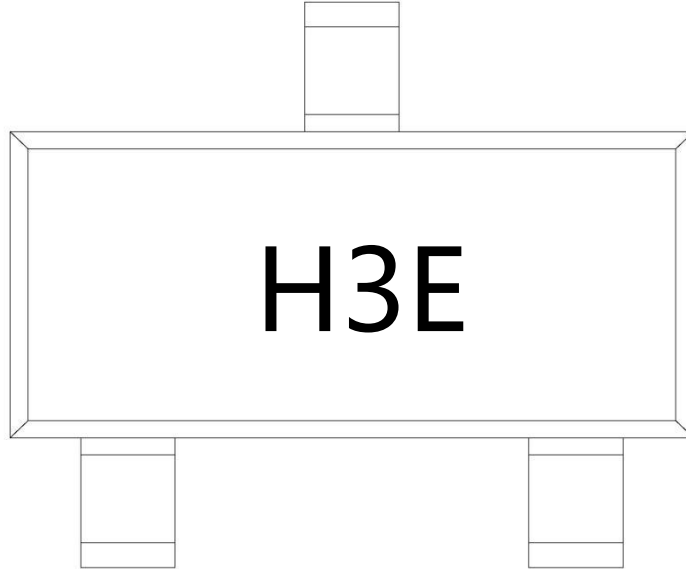
**Electrical Characteristics(Ta=25°C)**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	$I_{CBO}$	$V_{CB}=-30V$ $I_E=0$			-0.015	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE}=-5.0V$ $I_C=-2.0mA$	125		800	
Collector to Emitter Saturation Voltage	$V_{CE(sat)(1)}$	$I_C=-10mA$ $I_B=-0.5mA$		-0.09	-0.3	V
	$V_{CE(sat)(2)}$	$I_C=-100mA$ $I_B=-5.0mA$		-0.25	-0.65	V
Base to Emitter Saturation Voltage	$V_{BE(sat)(1)}$	$I_C=-10mA$ $I_B=-0.5mA$		-0.7		V
	$V_{BE(sat)(2)}$	$I_C=-100mA$ $I_B=-5.0mA$		-0.9		V
Collector to Emitter Voltage	$V_{CE(ON)(1)}$	$V_{CE}=5.0V$ $I_C=2.0mA$	-0.6	-0.65	-0.75	V
	$V_{CE(ON)(2)}$	$V_{CE}=5.0V$ $I_C=10mA$			-0.82	V
Transition Frequency	$f_T$	$V_{CE}=5.0V$ $I_C=10mA$ $f=100MHz$		150		MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V$ $I_E=0$ $f=1.0MHz$		4.5		pF
Noise Figure	NF	$V_{CE}=6.0V$ $I_C=0.1mA$ $R_g=10K\Omega$ $f=1.0KHz$		2.0	10	dB

Electrical Characteristic Curve



Marking Instructions



Note:

H: Company Code.

3E: Product Type Code

h <sub>FE</sub> Classifications Symbol	A	B	C
h <sub>FE</sub> Range	125~250	220~475	420~800
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Packaging SPEC.

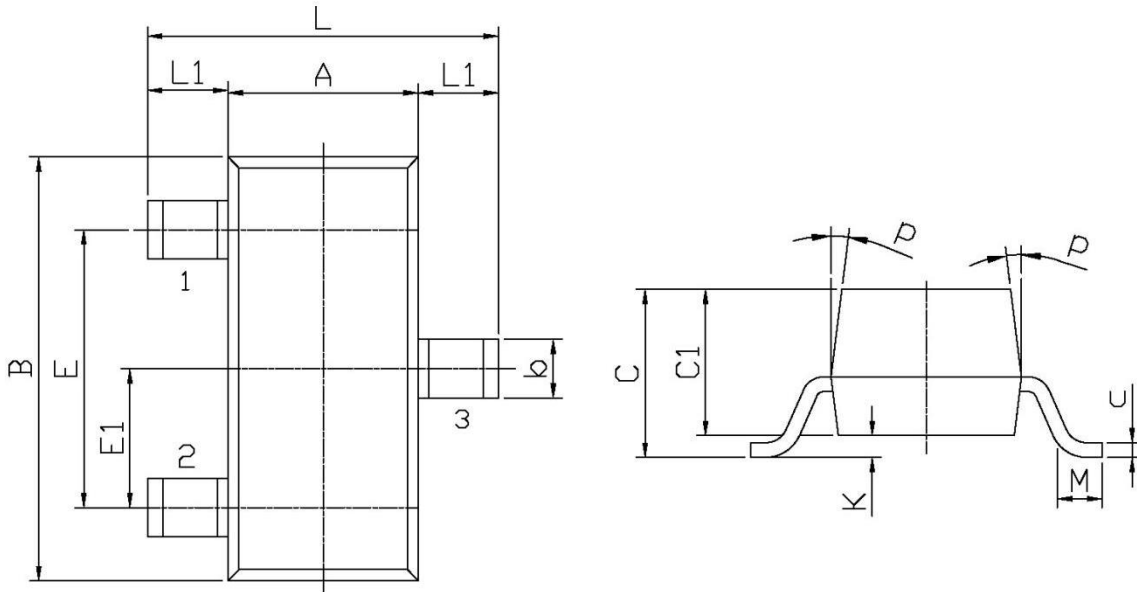
REEL INFORMATION

Package Type	Units					Dimension (unit: mm <sup>3</sup> )		
	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" x8	180x120x180	390x385x205

Package Outline Dimensions

SOT-23

单位: mm



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
L	2.2	2.7	C	1.30Max	
L1	0.45	0.65	C1	0.90	1.20
A	1.15	1.50	c	0.05	0.20
B	2.70	3.10	K	0	0.10
E	1.70	2.10	M	0.20MIN	
E1	0.85	1.05	P	7°	
b	0.35	0.55			