

### Description

Silicon PNP transistor in a SOT-23 Plastic Package

### Features

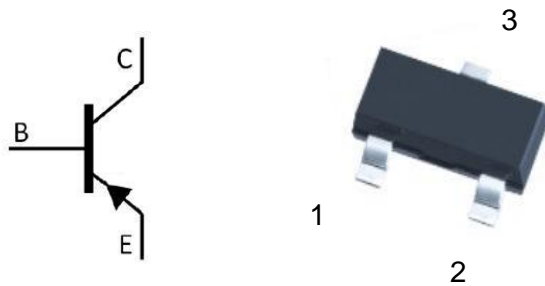
- Collector currents up to 600 mA
- Halogen-free Product

### Applications

General purpose amplifier.

Symbol	Parameter	Max	Unit
$V_{CE0}$	collector-emitter voltage	-60	V
$I_c$	collector current (DC)	-600	mA

### Equivalent Circuit & Pinning



PIN1: Base

PIN 2: Emitter

PIN 3: Collector

### hFE Classifications & Marking

h <sub>FE</sub> Range	100~300
Marking	H2F

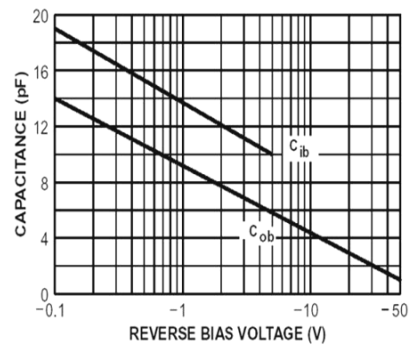
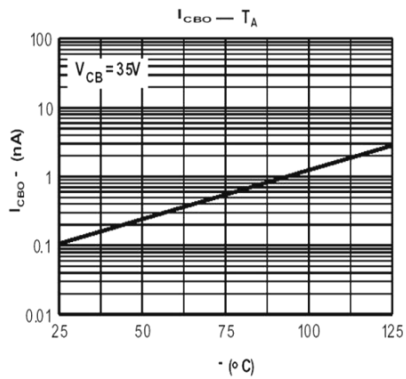
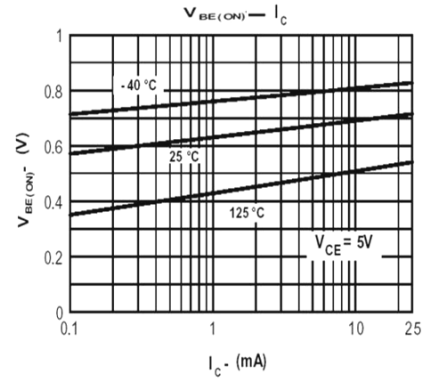
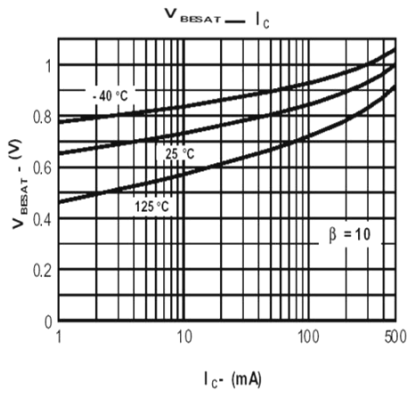
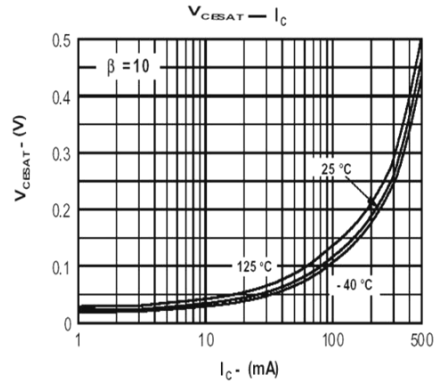
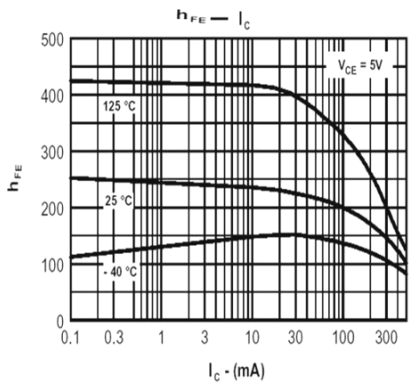
**Absolute Maximum Ratings(Ta=25°C)**

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	-60	V
Collector to Emitter Voltage	$V_{CEO}$	-60	V
Emitter to Base Voltage	$V_{EBO}$	-5.0	V
Collector Current	$I_C$	-600	mA
Collector Power Dissipation	$P_C$	350	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-55~150	°C

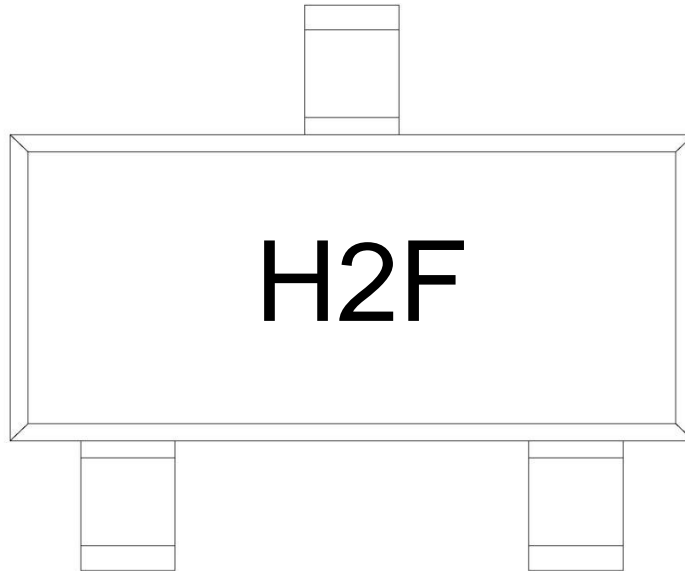
**Electrical Characteristics(Ta=25°C)**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	$V_{CBO}$	$I_C=-10\mu A$ $I_E=0$	-60			V
Collector to Emitter Breakdown Voltage	$V_{CEO}$	$I_C=-10mA$ $I_B=0$	-60			V
Emitter to Base Breakdown Voltage	$V_{EBO}$	$I_E=-10\mu A$ $I_C=0$	-5.0			V
Collector Cut-Off Current	$I_{CBO}$	$V_{CB}=-50V$ $I_E=0$			-0.01	$\mu A$
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-10V$ $I_C=-150mA^*$	100		300	
	$h_{FE(2)}$	$V_{CE}=-10V$ $I_C=-500mA^*$	50			
	$h_{FE(3)}$	$V_{CE}=-10V$ $I_C=-10mA$	100			
	$h_{FE(4)}$	$V_{CE}=-10V$ $I_C=-1.0mA$	100			
	$h_{FE(5)}$	$V_{CE}=-10V$ $I_C=-0.1mA$	75			
Collector-Emitter Saturation Voltage	$V_{CE(sat)(1)}$	$I_C=-150mA$ $I_B=-15mA$			-0.4	V
	$V_{CE(sat)(2)}$	$I_C=-500mA$ $I_B=-50mA$			-1.6	V
Base-Emitter Saturation Voltage	$V_{BE(sat)(1)}$	$I_C=-150mA$ $I_B=-15mA$			-1.3	V
	$V_{BE(sat)(2)}$	$I_C=-500mA$ $I_B=-50mA$			-2.6	V
Transition Frequency	$f_T$	$V_{CE}=-20V$ $I_C=-50mA$ $f=100MHz$	200			MHz
Output Capacitance	$C_{ob}$	$V_{CB}=-10V$ $I_E=0$ $f=1.0MHz$			8.0	pF
Turn-On Time	$t_{on}$	$V_{CC}=-30V$ $I_C=-150mA$ $I_{B1}=-15mA$			50	ns
Turn-Off Time	$t_{off}$	$V_{CC}=-30V$ $I_C=-150mA$ $I_{B1}=I_{B2}=-15mA$			100	ns

Electrical Characteristic Curve



Marking Instructions



Note:

H: Company Code  
2F: Product Type Code

Packaging SPEC.

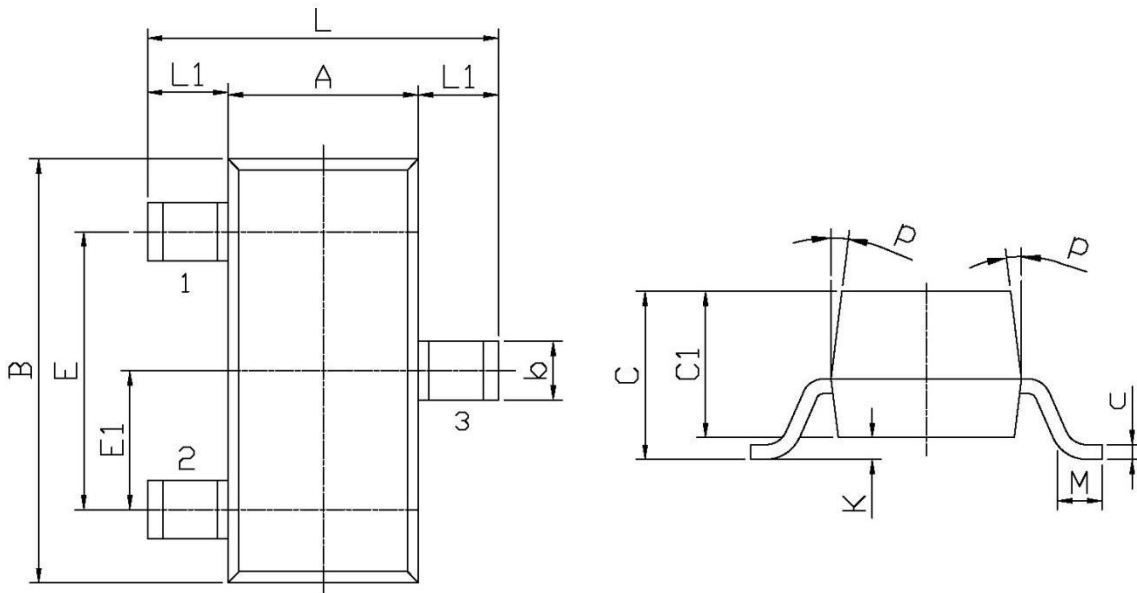
REEL INFORMATION

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	180×120×180	390×385×205

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			