

# 2SB1260

## PNP SILICON TRANSISTOR

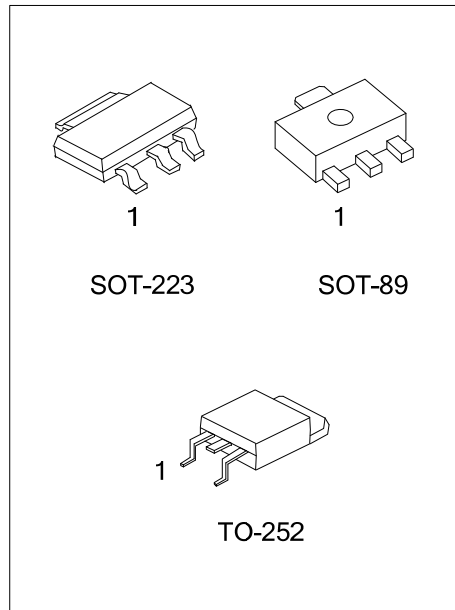
### POWER TRANSISTOR

#### DESCRIPTION

The UTC **2SB1260** is a epitaxial planar type PNP silicon transistor.

#### FEATURES

- \* High breakdown voltage and high current.  
 $BV_{CEO} = -80V$ ,  $I_C = -1A$
- \* Good  $h_{FE}$  linearity.
- \* Low  $V_{CE(SAT)}$



#### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SB1260L-x-AA3-R	2SB1260G-x-AA3-R	SOT-223	B	C	E	Tape Reel
2SB1260L-x-AB3-R	2SB1260G-x-AB3-R	SOT-89	B	C	E	Tape Reel
2SB1260L-x-TN3-R	2SB1260G-x-TN3-R	TO-252	B	C	E	Tape Reel

Note: Pin Assignment: B: Base    C: Collector    E: Emitter

<p>2SB1260G-x-AA3-R</p> <ul style="list-style-type: none"> <li>(1) Packing Type</li> <li>(2) Package Type</li> <li>(3) Rank</li> <li>(4) Green Package</li> </ul>	<ul style="list-style-type: none"> <li>(1) R: Tape Reel</li> <li>(2) AA3: SOT-223, AB3: SOT-89, TN3: TO-252</li> <li>(3) refer to Classification of <math>h_{FE}</math></li> <li>(4) G: Halogen Free and Lead Free, L: Lead Free</li> </ul>
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#### MARKING

Packing	Marking
SOT-223	<ul style="list-style-type: none"> <li>L: Lead Free</li> <li>G: Halogen Free</li> <li>Data Code</li> </ul>
SOT-89	<ul style="list-style-type: none"> <li>Date Code</li> <li>L: Lead Free</li> <li>G: Halogen Free</li> </ul>
TO-252	<ul style="list-style-type: none"> <li>UTC</li> <li>L: Lead Free</li> <li>G: Halogen Free</li> <li>Data Code</li> <li>Lot Code</li> </ul>

■ ABSOLUTE MAXIMUM RATINGS (  $T_A=25^{\circ}\text{C}$ , unless otherwise specified )

PARAMETER		SYMBOL	RATINGS	UNIT
Collector -Base Voltage		$V_{CB0}$	-80	V
Collector -Emitter Voltage		$V_{CE0}$	-80	V
Emitter -Base Voltage		$V_{EB0}$	-5	V
Peak Collector Current (single pulse, $P_w=100\text{ms}$ )		$I_{CM}$	-2	A
DC Collector Current		$I_C$	-1	A
Power Dissipation	SOT-223	$P_D$	1	W
	SOT-89		0.5	W
	TO-252		1.9	W
Junction Temperature		$T_J$	+150	$^{\circ}\text{C}$
Storage Temperature		$T_{STG}$	-40 ~ +150	$^{\circ}\text{C}$

Note 1. Printed circuit board, 1.7mm thick, collector copper plating 100mm<sup>2</sup> or larger.

2. Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (  $T_A=25^{\circ}\text{C}$ , unless otherwise specified )

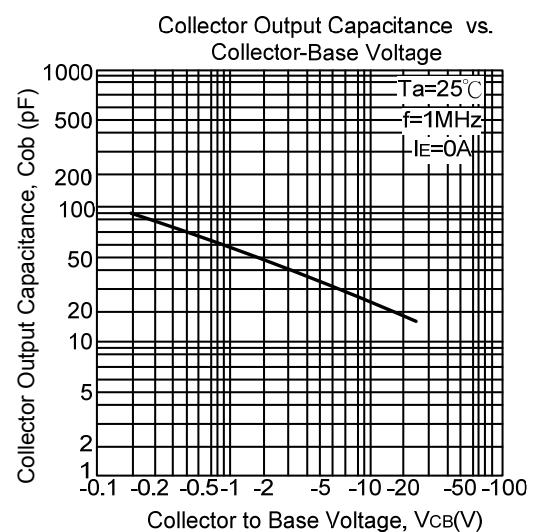
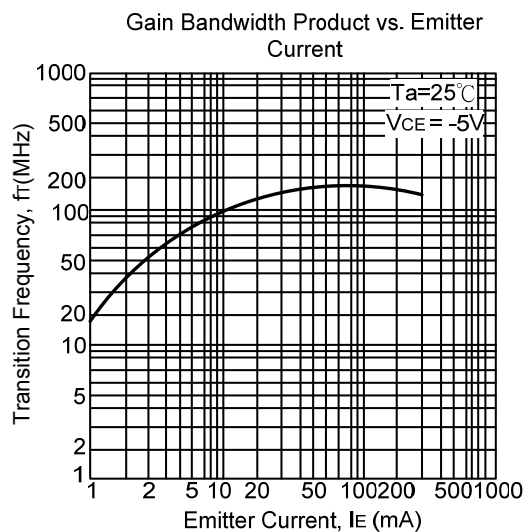
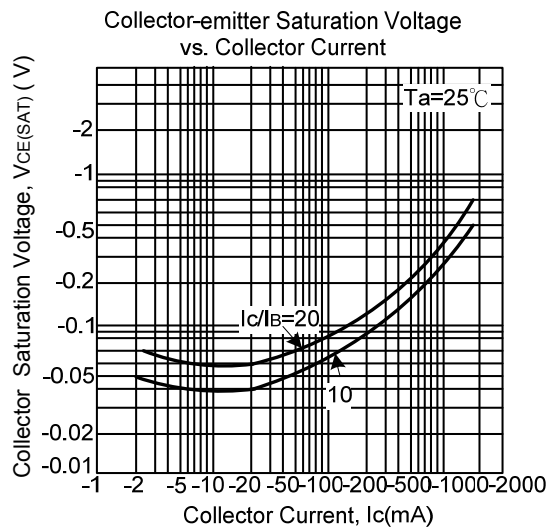
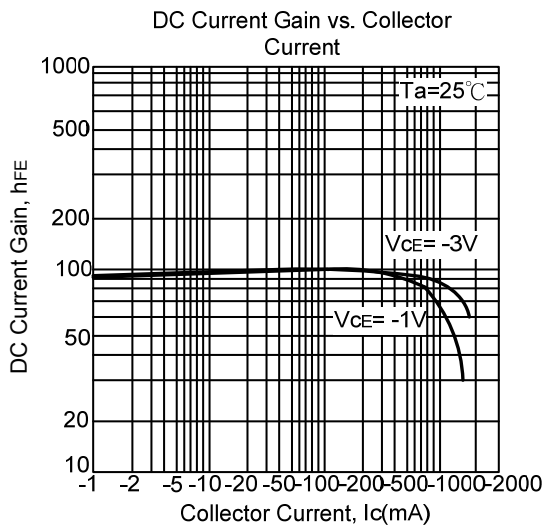
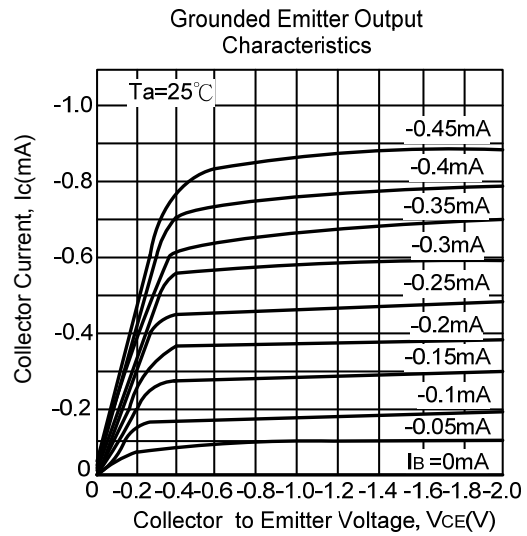
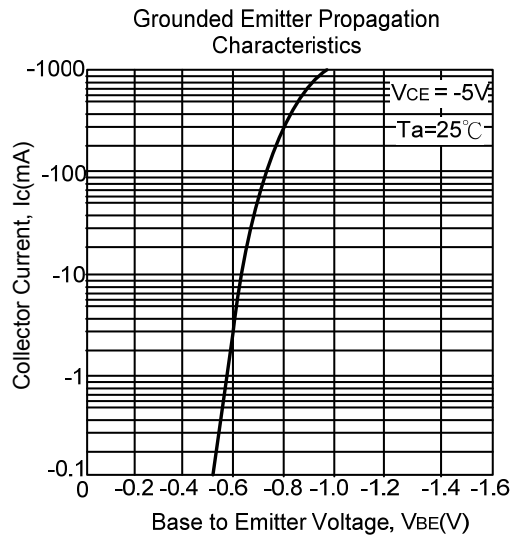
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Base Breakdown Voltage	$BV_{CB0}$	$I_C = -50\mu\text{A}$	-80			V
Collector Emitter Breakdown Voltage	$BV_{CE0}$	$I_C = -1\text{mA}$	-80			V
Emitter Base Breakdown Voltage	$BV_{EB0}$	$I_E = -50\mu\text{A}$	-5			V
Collector Cut-Off Current	$I_{CB0}$	$V_{CB} = -60\text{V}$			-1	$\mu\text{A}$
Emitter Cut-Off Current	$I_{EB0}$	$V_{EB} = -4\text{V}$			-1	$\mu\text{A}$
DC Current Gain(Note 1)	$h_{FE}$	$V_{CE} = -3\text{V}$ , $I_{OUT} = -0.1\text{A}$	82		390	
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C = -500\text{mA}$ , $I_B = -50\text{mA}$			-0.4	V
Transition Frequency	$f_T$	$V_{CE} = -5\text{V}$ , $I_E = 50\text{mA}$ , $f = 30\text{MHz}$		100		MHz
Output Capacitance	$C_{ob}$	$V_{CB} = -10\text{V}$ , $I_E = 0$ , $f = 1\text{MHz}$		25		pF

Note 1: Pulse test:  $P_w < 300\mu\text{s}$ , Duty Cycle  $< 2\%$

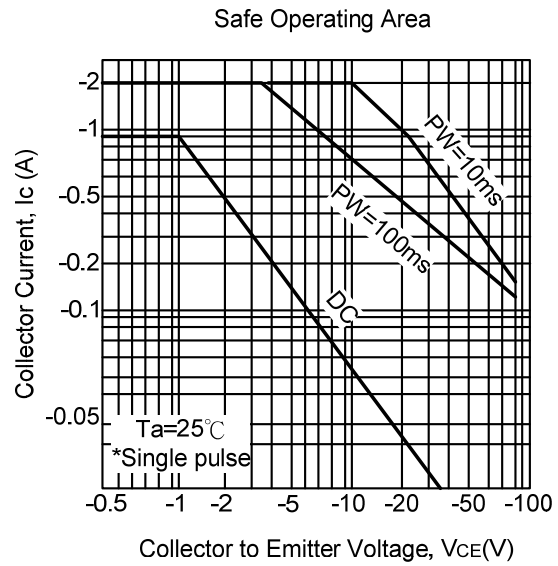
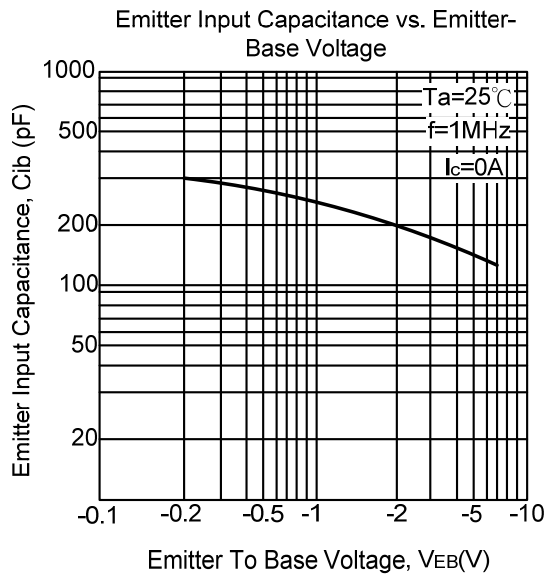
■ CLASSIFICATION OF  $h_{FE}$

RANK	P	Q	R
RANGE	82 ~ 180	120 ~ 270	180 ~ 390

## TYPICAL CHARACTERISTICS



■ TYPICAL CHARACTERISTICS(Cont.)



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