# 2SB1260

## PNP SILICON TRANSISTOR

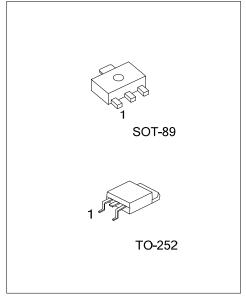
## **POWER TRANSISTOR**

#### **■** DESCRIPTION

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

#### **■ FEATURES**

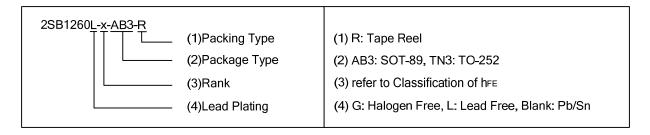
- $^{\star}$  High breakdown voltage and high current. BV<sub>CEO</sub>= -80V, I<sub>C</sub>= -1A
- \* Good h<sub>FE</sub> linearity.
- \* Low  $V_{\text{CE(SAT)}}$



Lead-free: 2SB1260L Halogen-free: 2SB1260G

#### ORDERING INFORMATION

Ordering Number			Package	Pin Assignment			Packing	
Normal	Lead Free	Halogen Free	Fackage	1	2	3	Facking	
2SB1260-x-AB3-R	2SB1260L-x-AB3-R	2SB1260G-x-AB3-R	SOT-89	В	С	E	Tape Reel	
2SB1260-x-TN3-R	2SB1260L-x-TN3-R	2SB1260G-x-TN3-R	TO-252	В	С	Е	Tape Reel	



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## ■ **ABSOLUATE MAXIUM RATINGS** (Ta = $25^{\circ}$ C)

PARAMETER	SYMBOL	RATINGS	UNIT	
Collector -Base Voltage		$V_{CBO}$	-80	V
Collector -Emitter Voltage	$V_{CEO}$	-80	V	
Emitter -Base Voltage	$V_{EBO}$	-5	V	
Peak Collector Current (single pulse, Pw=100ms)	I <sub>CM</sub>	-2	Α	
DC Collector Current		Ic	-1	Α
Dower Dissipation	SOT-89	D	0.5	W
Power Dissipation	TO-252	$P_D$	1.9	W
Junction Temperature	$T_J$	+150	$^{\circ}$ C	
Storage Temperature	$T_{STG}$	-40 ~ +150	$^{\circ}\!\mathbb{C}$	

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

## ■ **ELECTRICAL CHARACTERISTICS** (Ta= 25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Base Breakdown Voltage	BV <sub>CBO</sub>	I <sub>C</sub> = -50 μ A	-80			V
Collector Emitter Breakdown Voltage	BV <sub>CEO</sub>	I <sub>C</sub> = -1mA	-80			V
Emitter Base Breakdown Voltage	BV <sub>EBO</sub>	$I_E = -50 \mu$ A	-5			V
Collector Cut-Off Current	I <sub>CBO</sub>	V <sub>CB</sub> =-60V			-1	$\mu$ A
Emitter Cut-Off Current	I <sub>EBO</sub>	V <sub>EB</sub> =-4V			-1	$\mu$ A
DC Current Gain(Note 1)	h <sub>FE</sub>	V <sub>CE</sub> =-3V, I <sub>OUT</sub> =-0.1A	82		390	
Collector-Emitter Saturation Voltage	V <sub>CE(SAT)</sub>	I <sub>C</sub> =-500mA, I <sub>B</sub> =-50mA			-0.4	<b>V</b>
Transition Frequency	f <sub>T</sub>	$V_{CE}$ = -5V, $I_E$ =50mA, f=30MHz		100		MHz
Output Capacitance	Cob	V <sub>CB</sub> =-10V, I <sub>E</sub> =0, f=1MHz		25		pF

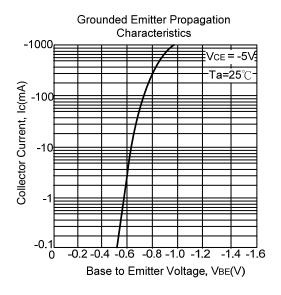
Note 1: Pulse test:  $P_W$ <300 $\mu$ s, Duty Cycle<2%

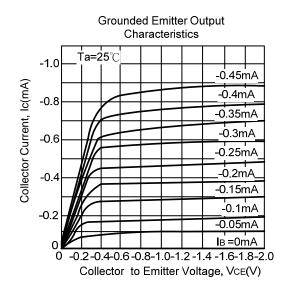
## ■ CLASSIFICATION OF h<sub>FE</sub>

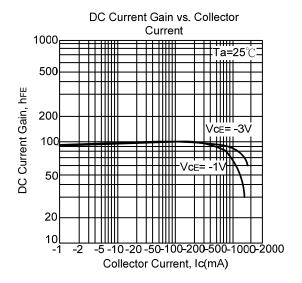
RANK	Р	Q	R		
RANGE	82 ~ 180	120 ~ 270	180 ~ 390		

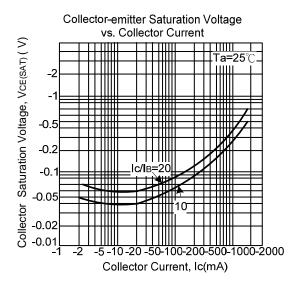
<sup>2.</sup> Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

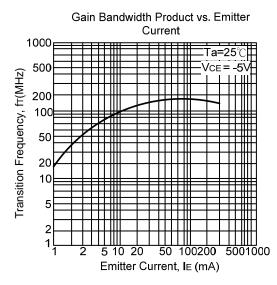
#### **■ TYPICAL CHARACTERICS**

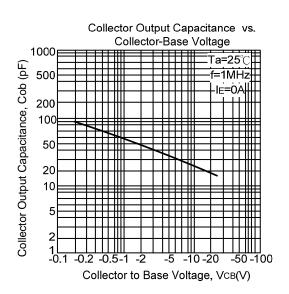




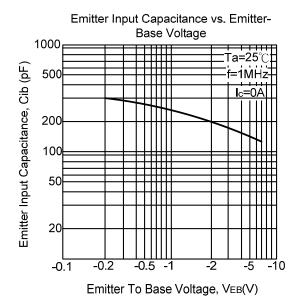


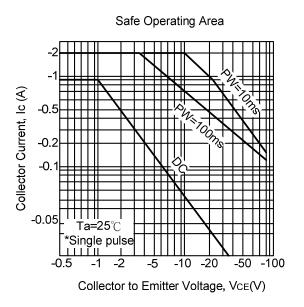






#### **■ TYPICAL CHARACTERICS(Cont.)**





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