

To our customers,

Old Company Name in Catalogs and Other Documents

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Renesas Electronics website: <http://www.renesas.com>

April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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PNP SILICON TRANSISTOR

2SA1626

DESCRIPTION The 2SA1626 is designed for general purpose amplifier and high speed switching applications.

- FEATURES**
- High Voltage.
 - High Speed Switching.
 - Low Collector Saturation Voltage.

ABSOLUTE MAXIMUM RATINGS

Maximum Temperatures

Storage Temperature -55 to $+150$ °C

Junction Temperature 150 °C Maximum

Maximum Power Dissipation ($T_a = 25$ °C)

Total Power Dissipation 1.0 W

Maximum Voltages and Currents ($T_a = 25$ °C)

V_{CBO} Collector to Base Voltage -400 V

V_{CEO} Collector to Emitter Voltage -400 V

V_{EBO} Emitter to Base Voltage -7.0 V

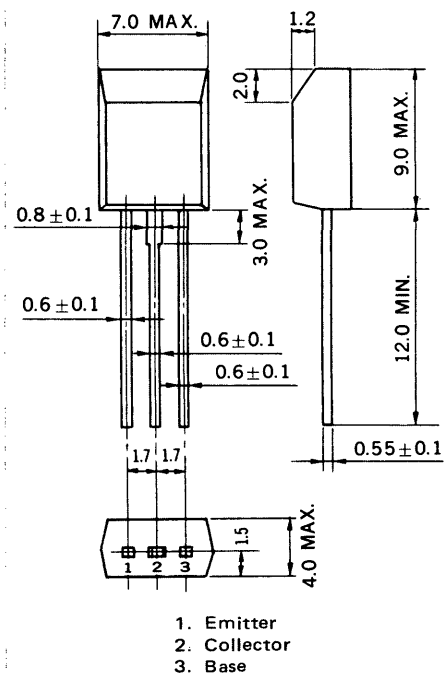
I_C Collector Current (DC) -2.0 A

I_C Collector Current (pulse)* -4.0 A

* $PW \leq 10$ ms, Duty Cycle ≤ 50 %

PACKAGE DIMENSIONS

in millimeters



ELECTRICAL CHARACTERISTICS ($T_a = 25$ °C)

SYMBOL	CHARACTERISTIC	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
h_{FE1}^{**}	DC Current Gain	40	60	120	—	$V_{CE} = -5.0$ V, $I_C = -0.1$ A
h_{FE2}^{**}	DC Current Gain	6	22	—	—	$V_{CE} = -5.0$ V, $I_C = -1.0$ A
f_T	Gain Bandwidth Product	10	40	—	MHz	$V_{CE} = -10$ V, $I_E = 0.1$ A
C_{ob}	Output Capacitance	—	30	40	pF	$V_{CB} = -10$ V, $I_E = 0$, $f = 1.0$ MHz
I_{CBO}	Collector Cutoff Current	—	—	-10	μ A	$V_{CB} = -400$ V, $I_E = 0$
I_{EBO}	Emitter Cutoff Current	—	—	-10	μ A	$V_{EB} = -5.0$ V, $I_C = 0$
$V_{CE(sat)}^{**}$	Collector Saturation Voltage	—	-0.25	-0.5	V	$I_C = -0.5$ A, $I_B = -0.1$ A
$V_{BE(sat)}^{**}$	Base Saturation Voltage	—	-0.85	-1.2	V	$I_C = -0.5$ A, $I_B = -0.1$ A
t_{on}	Turn On Time	—	0.03	0.5	μ s	$I_C = -1.0$ A, $R_L = 150$ Ω $I_{B1} = -I_{B2} = -0.2$ A $V_{CC} = -150$ V
t_{stg}	Storage Time	—	1.4	2.0	μ s	
t_f	Fall Time	—	0.1	0.7	μ s	

** Pulsed $PW \leq 350$ μ s, Duty Cycle ≤ 2 %

Classification of h_{FE1}

Rank	L	K
Range	40 to 80	60 to 120

Test Conditions: $V_{CE} = -5.0$ V, $I_C = -0.1$ A

TYPICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)