

# 2SC5926

## Silicon NPN triple diffusion planar type

For power amplification

### ■ Features

- High forward current transfer ratio  $h_{FE}$  which has satisfactory linearity.
- Low collector-emitter saturation voltage  $V_{CE(sat)}$
- Allowing supply with the radial taping

### ■ Absolute Maximum Ratings $T_C = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	$V_{CBO}$	80	V
Collector-emitter voltage (Base open)	$V_{CEO}$	60	V
Emitter-base voltage (Collector open)	$V_{EBO}$	6	V
Collector current	$I_C$	3	A
Peak collector current	$I_{CP}$	6	A
Collector power dissipation	$P_C$	15	W
	$T_a = 25^\circ\text{C}$	2.0	
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

Note) \*: Non-repetitive peak collector current

### ■ Electrical Characteristics $T_C = 25^\circ\text{C} \pm 3^\circ\text{C}$

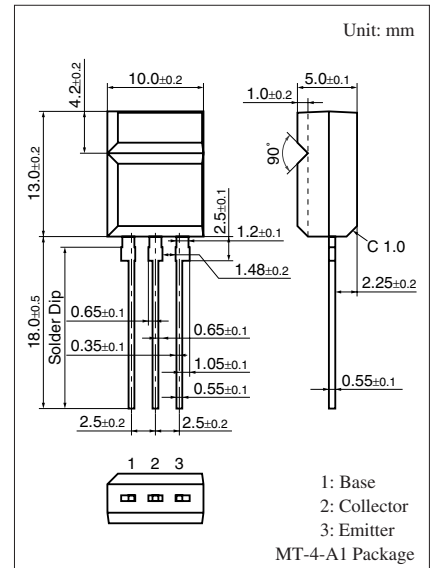
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-emitter voltage (Base open)	$V_{CEO}$	$I_C = 10\text{ mA}$ , $I_B = 0$	60			V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{CB} = 80\text{ V}$ , $I_E = 0$			100	$\mu\text{A}$
Collector-emitter cutoff current (Base open)	$I_{CEO}$	$V_{CE} = 40\text{ V}$ , $I_B = 0$			100	$\mu\text{A}$
Emitter-base cutoff current (Collector open)	$I_{EBO}$	$V_{EB} = 6\text{ V}$ , $I_C = 0$			100	$\mu\text{A}$
Forward current transfer ratio *1	$h_{FE1}$ *2	$V_{CE} = 4\text{ V}$ , $I_C = 0.5\text{ A}$	500		2 300	—
	$h_{FE2}$	$V_{CE} = 4\text{ V}$ , $I_C = 3\text{ A}$	100			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 1\text{ A}$ , $I_B = 20\text{ mA}$			0.7	V
Turn-on time	$t_{on}$	$I_C = 1\text{ A}$ , Resistance loaded	0.2			$\mu\text{s}$
Storage time	$t_{stg}$	$I_{B1} = 0.1\text{ A}$ , $I_{B2} = -0.1\text{ A}$	1.5			$\mu\text{s}$
Fall time	$t_f$	$V_{CC} = 50\text{ V}$	0.1			$\mu\text{s}$

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

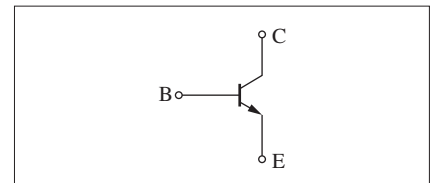
2. \*1: Pulse measurement

\*2: Rank classification

Rank	Q	P
$h_{FE1}$	500 to 1 500	1 300 to 2 300



### Internal Connection



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