

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 $T_C = 25^\circ\text{C} \pm 3^\circ\text{C}$

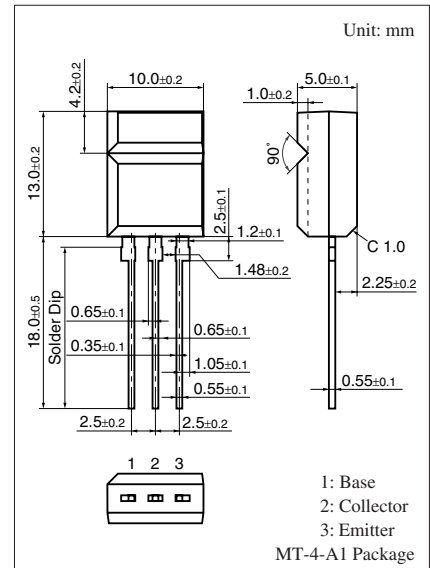
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = 10\text{ mA}$, $I_B = 0$	60			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = 80\text{ V}$, $I_E = 0$			100	μA
Collector-emitter cutoff current (Base open)	I_{CEO}	$V_{CE} = 40\text{ V}$, $I_B = 0$			100	μA
Emitter-base cutoff current (Collector open)	I_{EBO}	$V_{EB} = 6\text{ V}$, $I_C = 0$			100	μA
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			μs
Storage time	t_{stg}	$I_{B1} = 0.1\text{ A}$, $I_{B2} = -0.1\text{ A}$	1.5			μs
Fall time	t_f	$V_{CC} = 50\text{ V}$	0.1			μs

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

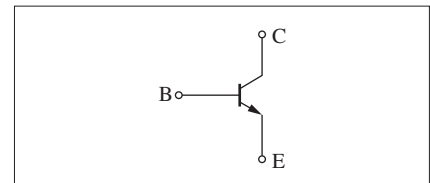
2. *1: Pulse measurement

*2: Rank classification

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



Internal Connection



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