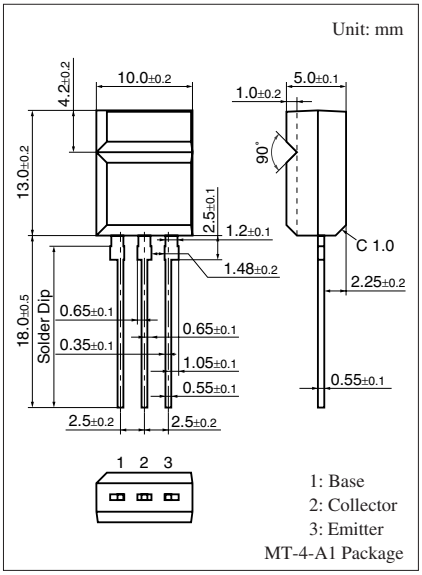
2SC5926

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

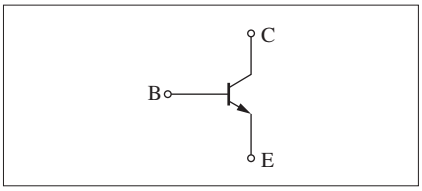


■ Absolute Maximum Ratings $T_C = 25°C$

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
$T_a = 25°C$		2.0	
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

Note) ∗: Non-repetitive peak collector current

Internal Connection



■ Electrical Characteristics $T_C = 25°C \pm 3°C$

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