Ordering number:ENN781G

PNP/NPN Epitaxial Planar Silicon Transistors

2SA1208/2SC2910

High-Voltage Switching
Audio 80W Output Predriver Applications

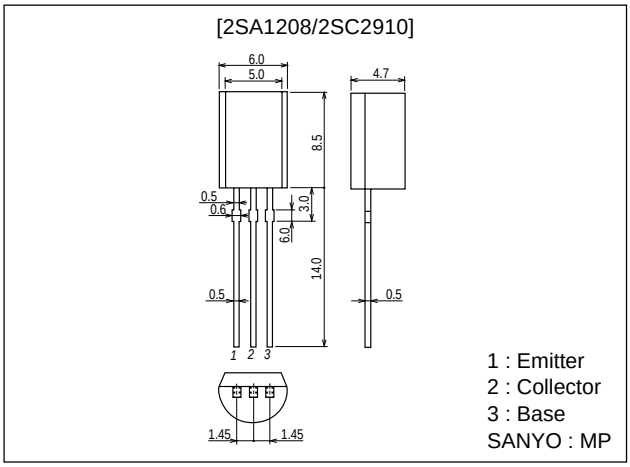
Features

- Adoption of FBET process.
- High breakdown voltage.
- Excellent linearity of h_{FE} and small C_{ob}.
- Fast swtching speed.

Package Dimensions

unit:mm

2006B



( ) : 2SA1208

Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		(–)180	V
Collector-to-Emitter Voltage	V_{CEO}		(–)160	V
Emitter-to-Base Voltage	V_{EBO}		(–)5	V
Collector Current	I_C		(–)70	mA
Collector Current (Pulse)	I_{CP}		(–)140	mA
Collector Dissipation	P_C		900	mW
Junction Temperature	Tj		150	˚C
Storage Temperature	Tstg		–55 to +150	˚C

Electrical Characteristics at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	V_{CB}=(–)80V, I_E=0			(–)0.1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=(–)4V, I_C=0			(–)0.1	μA
DC Current Gain	h_{FE}	V_{CE}=(–)5V, I_C=(–)10mA	100*		400*	
Gain-Bandwidth Product	f_T	V_{CE}=(–)10V, I_C=(–)10mA		150		MHz
Output Capacitance	C_{ob}	V_{CB}=(–)10V, f=1MHz		(2.5)2.0		pF
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=(–)30mA, I_B=(–)3mA		0.08 (–0.14)	0.3 (–0.4)	V

* : The 2SA1208/2SC2910 are classified by 10mA h_{FE} are follows :

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Rank	R	S	T
h_{FE}	100 to 200	140 to 280	200 to 400

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TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

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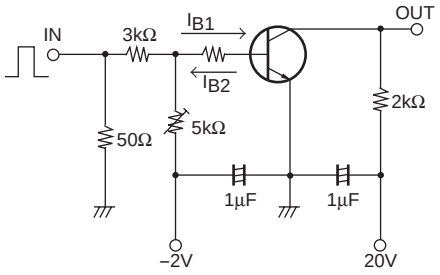
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Turn-ON Time	t_{on}	See specified Test Circuit		0.1		μs
Fall Time	t_f	See specified Test Circuit		0.2		μs
Storage Time	t_{stg}	See specified Test Circuit		1.0		μs

Switching Time Test Circuit



I_C=10I_{B1}=–10I_{B2}=10mA
(For PNP, the polarity is reversed.)