

2SA1246/2SC3114

High-Vebo, AF Amp Applications

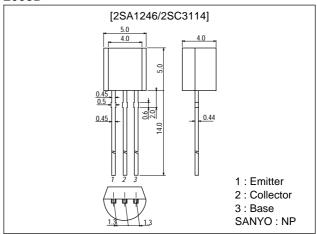
Features

- \cdot High V_{EBO} .
- · Wide ASO and highly resistant to breakdown.

Package Dimensions

unit:mm

2003B



(): 2SA1246

Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CBO}		(–)60	V
Collector-to-Emitter Voltage	V _{CEO}		(–)50	V
Emitter-to-Base Voltage	VEBO		(–)15	V
Collector Current	IC		(–)150	mA
Collector Current (Pulse)	I _{CP}		(–)300	mA
Collector Dissipation	PC		400	mW
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions		Ratings		
	Symbol		min	typ	max	Unit
Collector Cutoff Current	I _{CBO}	V _{CB} =(-)40V, I _E =0			(-)0.1	μΑ
Emitter Cutoff Current	I _{EBO}	V _{EB} =(-)10V, I _C =0			(-)0.1	μΑ
DC Current Gain	h _{FE}	V _{CE} =(-)6V, I _C =(-)1mA	100*		560*	
Gain-Bandwidth Product	fT	V _{CE} =(-)6V, I _C =(-)1mA		100		MHz
Common base Output Capacitance	C _{ob}	V _{CB} =(-)6V, f=1MHz		(4.2)3.0		pF
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =(-)50mA, I _B =(-)5mA			(-)0.5	V

^{*}: The 2SA1246/2SC3114 are classified as follows according to h_{FE} at 1mA.

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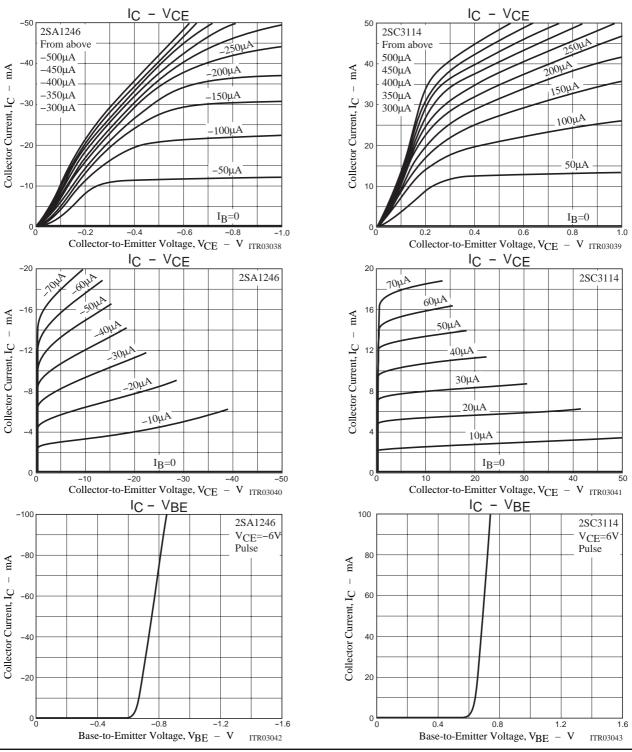
Rank	R	S	Т	U
hFE	100 to 200	140 to 280	200 to 400	280 to 560

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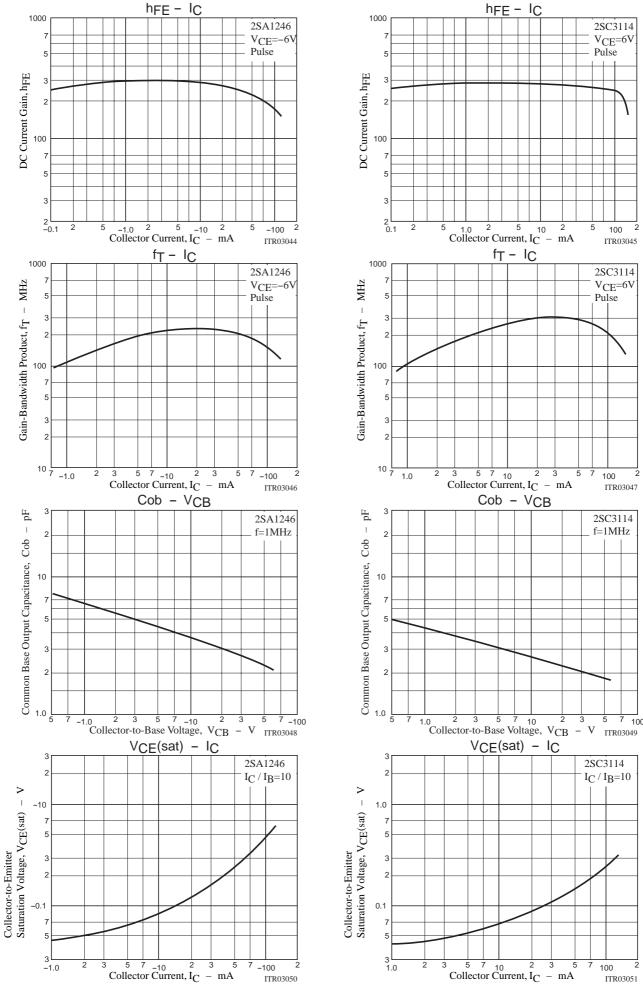
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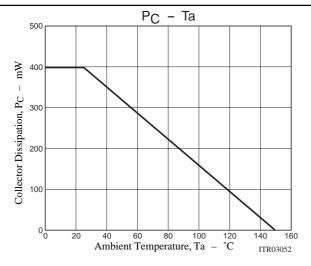
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Collector-to-Base Breakdown Voltage	V(BR)CBO	I _C =(-)10μΑ, I _E =0	(-)60			V
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	I _C =(−)1mA, R _{BE} =∞	(-)50			V
Emitter-to-Base Breakdown Voltage	V _{(BR)EBO}	I _E =(-)10μA, I _C =0	(–)15			V



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