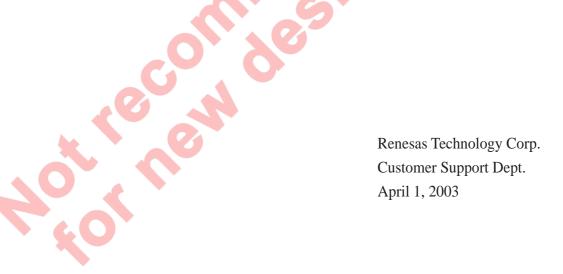
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2SA1025, 2SA1081, 2SA1082

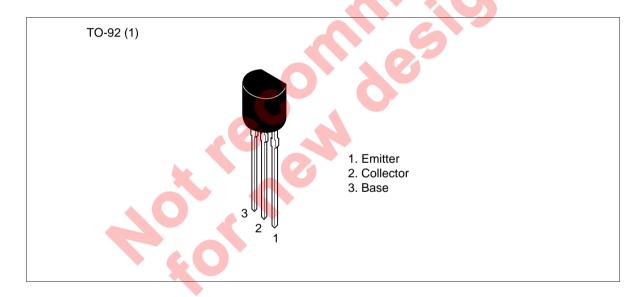
Silicon PNP Epitaxial



Application

- Low frequency amplifier
- Complementary pair with 2SC2396, 2SC2543 and 2SC2544

Outline



2SA1025, 2SA1081, 2SA1082

Absolute Maximum Ratings $(Ta = 25^{\circ}C)$

Item	Symbol	2SA1025	2SA1081	2SA1082	Unit
Collector to base voltage	V_{CBO}	-60	-90	-120	V
Collector to emitter voltage	V_{CEO}	-60	-90	-120	V
Emitter to base voltage	V_{EBO}	- 5	-5	- 5	V
Collector current	I _c	-100	-100	-100	mA
Emitter current	I _E	100	100	100	mA
Collector power dissipation	P _c	400	400	400	mW
Junction temperature	Tj	150	150	150	°C
Storage temperature	Tstg	-55 to +150	-55 to +150	-55 to +150	°C

Electrical Characteristics ($Ta = 25^{\circ}C$)

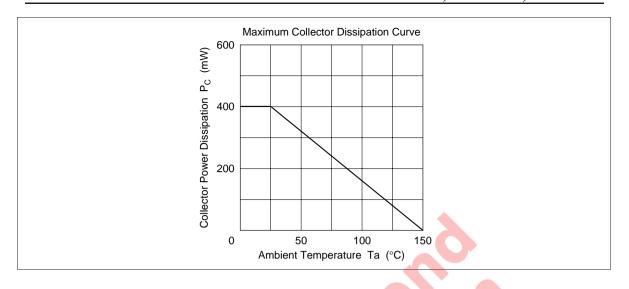
											7	
Electrical Characteristics (Ta = 25°C)												
		2SA1025		2SA1081		2SA1082						
Item	Symbol	Min	Тур	Max	Min	Тур	Max	Min	Тур	Max	Unit	Test conditions
Collector to base breakdown voltage	V _{(BR)CBO}	-60	_	_	-90		_	-120	7	_	V	$I_{C} = -10 \mu A, I_{E} = 0$
Collector to emitter breakdown voltage	V _{(BR)CEO}	-60	_	5	-90	_	6	-120	_	_	V	$I_C = -1 \text{ mA},$ $R_{BE} = \infty$
Emitter to base breakdown voltage	V _{(BR)EBO}	-5	0		- 5	1	-	– 5	_	_	μΑ	$I_E = -10 \ \mu A, \ I_C = 0$
Collector cutoff current	I _{CBO}	4		-0.1	~	7	-0.1	_	_	-0.1	μΑ	$V_{CB} = -50 \text{ V}, I_{E} = 0$
Emitter cutoff current	I _{EBO}	_	_	-0.1	3	_	-0.1	_	_	-0.1		$V_{EB} = -2 \text{ V}, I_{C} = 0$
DC current transfer ratio	h _{FE} *1	250	- (800	250	_	800	250	_	800		$V_{CE} = -12 \text{ V},$ $I_{C} = -2 \text{ mA}$
Collector to emitter saturation voltage	V _{CE(sat)}		5	-0.2	_	_	-0.2	_	_	-0.2	V	$I_C = -10 \text{ mA},$ $I_B = -1 \text{ mA}$
Base to emitter voltage	V _{BE}	Y	-0.6	_	_	-0.6	_	_	-0.6	_	V	$V_{CE} = -12 \text{ V},$ $I_{C} = -2 \text{ mA}$
Gain bandwidth product	f _T	_	90	_	_	90	_	_	90	_	MHz	$V_{CE} = -12 \text{ V},$ $I_{C} = -2 \text{ mA}$
Collector output capacitance	Cob	_	3.5	_	_	3.5	_	_	3.5	_	pF	$V_{CB} = -10 \text{ V}, I_{E} = 0,$ f = 1 MHz

Note: 1. The 2SA1025, 2SA1081 and 2SA1082 are grouped by $h_{\rm FE}$ as follows.

D	E
250 to 500	400 to 800

See characteristic curves of 2SA1083.

2SA1025, 2SA1081, 2SA1082





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