



**PRODUCT NAME :** 2SA1082 PNP General Purpose Transistor (Pack of 5)

**PRICE :** Rs 20.00

**SKU :** RM2119



NOTE: THE PRODUCT MAY BE DIFFERENT FROM IMAGE SHOWN ABOVE. Copyrights by Robomart.com

## DESCRIPTION

## Features

- Collector-Emitter Volt ( $V_{ce0}$ ): 120V
- Collector-Base Volt ( $V_{cb0}$ ): 120V
- Collector Current ( $I_c$ ): 0.1A
- $h_{fe}$ : 250-800 @ 2mA
- Power Dissipation ( $P_{tot}$ ): 400mW
- Current-Gain-Bandwidth ( $f_{total}$ ): 90MHz
- Type: PNP

## 2SA1025, 2SA1081, 2SA1082

### Absolute Maximum Ratings (Ta = 25°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	$T_j$	150	150	150	°C
Storage temperature	$T_{stg}$	-55 to +150	-55 to +150	-55 to +150	°C

### Electrical Characteristics (Ta = 25°C)

Item	Symbol	2SA1025			2SA1081			2SA1082			Unit	Test conditions
		Min	Typ	Max	Min	Typ	Max	Min	Typ	Max		
Collector to base breakdown voltage	$V_{(BR)CBO}$	-60	—	—	-90	—	—	-120	—	—	V	$I_C = -10 \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-60	—	—	-90	—	—	-120	—	—	V	$I_C = -1 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	-5	—	—	-5	—	—	-5	—	—	$\mu A$	$I_E = -10 \mu A, I_C = 0$
Collector cutoff current	$I_{CBO}$	—	—	-0.1	—	—	-0.1	—	—	-0.1	$\mu A$	$V_{CB} = -50 \text{ V}, I_E = 0$
Emitter cutoff current	$I_{EBO}$	—	—	-0.1	—	—	-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	$V_{CE(sat)}$	—	—	-0.2	—	—	-0.2	—	—	-0.2	V	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA}$
Base to emitter voltage	$V_{BE}$	—	-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	$C_{ob}$	—	3.5	—	—	3.5	—	—	3.5	—	pF	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$

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

D	E
250 to 500	400 to 800

See characteristic curves of 2SA1083.

**HITACHI**

