



PRODUCT NAME : 2SA933 PNP General Purpose Transistor (Pack of 5)

PRICE : Rs 39.00

SKU : RM2112



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

DESCRIPTION

Features

- Collector-Emitter Volt (V_{ce0}): 50V
- Collector-Base Volt (V_{cb0}): 60V
- Collector Current (I_c): 0.15A
- h_{fe} : 120-560 @ 1mA
- Power Dissipation (P_{tot}): 300mW
- Current-Gain-Bandwidth (f_{total}): 140MHz
- Type: PNP

**2SA1037AK / 2SA1576A / 2SA1774 /
 2SA2029 / 2SA933AS**

Transistors

● **Absolute maximum ratings (Ta=25°C)**

Parameter	Symbol	Limits	Unit
Collector-base voltage	V _{CB0}	-60	V
Collector-emitter voltage	V _{CE0}	-50	V
Emitter-base voltage	V _{EB0}	-6	V
Collector current	I _c	-0.15	A (DC)
Collector power dissipation	2SA1037AK, 2SA1576A	0.2	W
	2SA2029, 2SA1774	0.15	
	2SA933AS	0.3	
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55~+150	°C

● **Electrical characteristics (Ta=25°C)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV _{CB0}	-60	-	-	V	I _c =-50μA
Collector-emitter breakdown voltage	BV _{CE0}	-50	-	-	V	I _c =-1μA
Emitter-base breakdown voltage	BV _{EB0}	-6	-	-	V	I _E =-50μA
Collector cutoff current	I _{cBO}	-	-	-0.1	μA	V _{CB} =-60V
Emitter cutoff current	I _{EBO}	-	-	-0.1	μA	V _{EB} =-6V
Collector-emitter saturation voltage	V _{CE(sat)}	-	-	-0.5	V	I _c /I _B =-50mA/-5mA
DC current transfer ratio	h _{FE}	120	-	560	-	V _{CE} =-6V, I _c =-1mA
Transition frequency	f _r	-	140	-	MHz	V _{CE} =-12V, I _E =2mA, f=30MHz
Output capacitance	C _{ob}	-	4.0	5.0	pF	V _{CB} =-12V, I _E =0A, f=1MHz

● **Packaging specifications and h_{FE}**

Type	h _{FE}	Package	Taping				
		Code	T146	T106	TL	T2L	TP
		Basic ordering unit (pieces)	3000	3000	3000	8000	5000
2SA2029	QRS	-	-	-	○	-	
2SA1037AK	QRS	○	-	-	-	-	
2SA1576A	QRS	-	○	-	-	-	
2SA1774	QRS	-	-	○	-	-	
2SA933AS	QRS	-	-	-	-	○	

h_{FE} values are classified as follows:

Item	Q	R	S
h _{FE}	120~270	180~390	270~560



