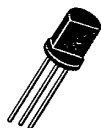


Signal Transistors

2N2923, 2N2924, 2N2925

T-29-19

Silicon Transistors



TO-98

The GE/RCA 2N2923, 2N2924, and 2N2925 types are planar passivated NPN silicon transistors intended for general purpose applications. The planar passivated construction assures excellent device stability and life. These high

performance, high value devices are made possible by utilizing advanced manufacturing techniques and epoxy encapsulation.

These types are supplied in JEDEC TO-98 package.

Devices in TO-98 package are supplied with and without seating flange (see Dimensional Outline).

MAXIMUM RATINGS, Absolute-Maximum Values:

COLLECTOR TO EMITTER VOLTAGE (V_{CE0})	25 V
EMITTER TO BASE VOLTAGE (V_{EB0})	5 V
COLLECTOR TO BASE VOLTAGE (V_{CB0})	25 V
CONTINUOUS COLLECTOR CURRENT (Note 1)	100 mA
TOTAL POWER DISSIPATION ($T_A \leq 25^\circ\text{C}$) (P_T) (Note 2)	360 mW
TOTAL POWER DISSIPATION ($T_A \leq 55^\circ\text{C}$) (P_T) (Note 2)	250 mW
OPERATING TEMPERATURE (T_J)	-55° to $+150^\circ\text{C}$
STORAGE TEMPERATURE (T_{stg})	-55° to $+150^\circ\text{C}$
LEAD TEMPERATURE, $1/16" \pm 1/32"$ (1.5mm $\pm$ 0.8mm) from case for 10s max. (T_L)	$+260^\circ\text{C}$

NOTES:

1. Determined from power limitations due to saturation voltage at this current.
2. Derate 3.6 mW/ $^\circ\text{C}$ increase in ambient temperature above 25°C .

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Signal Transistors

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2N2923, 2N2924, 2N2925ELECTRICAL CHARACTERISTICS, At Ambient Temperature (T_A) = 25°C Unless Otherwise Specified

CHARACTERISTICS	SYMBOL	LIMITS			UNITS
		2N2923, 2N2924, 2N2925			
		MIN.	TYP.	MAX	
Collector Cutoff Current ($V_{CB} = 25V$)	I_{CBO}	—	—	0.1	μA
($V_{CB} = 25V, T_A = 100^{\circ}C$)	I_{CBO}	—	—	15	
Emitter Cutoff Current ($V_{EBO} = 5V$)	I_{EBO}	—	—	0.1	
DC Forward Current Transfer Ratio ($V_{CE} = 4.5V, I_C = 2mA$)	h_{FE}				
2N2923		—	115	—	—
2N2924		—	155	—	—
2N2925		—	215	—	—
Small-Signal Forward Current Transfer Ratio ($V_{CE} = 10V, I_C = 2mA, f = 1kHz$)	h_{fe}				
2N2923		90	—	180	—
2N2924		150	—	300	—
2N2925		235	—	470	—
Input Impedance ($V_{CE} = 10V, I_C = 2mA, f = 1kHz$)	h_{ib}	—	15	—	Ω
Gain Bandwidth Product ($I_C = 4mA, V_{CB} = 5V$)	f_T	—	160	—	MHz
Noise Figure ($I_C = 100\mu A, V_{CE} = 5V, f = 10kHz$, BW = 1 Hz, $R_g = 2000\Omega$) For 2N2925 only	NF	—	2.8	—	dB
Collector Capacitance ($V_{CB} = 10V, I_E = 0, f = 1MHz$)	C_{cbo}	4.5	7	10	pF

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TERMINAL CONNECTIONS

Lead 1 - Emitter
Lead 2 - Collector
Lead 3 - Base