2N322, 2N323, 2N324

Outline Drawing No. 29

The 2N322, 2N323, 2N324 are alloy junction PNP transistors intended for driver service in audio amplifiers. They are miniaturized versions of the 2N190 series of G.E. transistors. By control of transistor characteristics during manufacture, a specific power gain is provided for each type. Special processing techniques and the use of hermetic seals provides stability of these characteristics throughout life.

SPECIFICATIONS

ABSOLUTE MAXIMUM RATINGS:

Voltages		
Collector to Emitter	V_{CE}	−16 volts
Collector to Base	V_{CB}	−16 volts
Collector Current	I_C	50 ma
Power		
Collector Dissipation	P_{CM}	75 mw
Temperature		
Operating and Storage Range	T_A-T_{STG}	−65 to +85 °C

TYPICAL ELECTRICAL CHARACTERISTICS: (25°C)

D.C. Characteristics		2N322	2N323	2N324	
Base Current Gain (I_C = 20 ma; V_{CE} = 1v)	h_{FE}	48	80	95	
Collector to Emitter Voltage (R_{EB} = 10 K, I_C = .6 ma)	V_{CE}	16	16	16	volts
Collector Cutoff Current	I_{CO}	10	10	10	μa
Max. Collector Cutoff Current	I_{CO}	16	16	16	μa
Small Signal Characteristics					
Frequency Cutoff (V_{CB} = −5v; I = 1 ma)	f_{ab}	29	33	34	
Collector Capacity (V_{CB} = −5v; I = 1 ma)	C_{ob}	24	24	24	μμf
Noise Figure (V_{CB} = −5v; I = 1 ma)	NF	10	10	10	db
Input Impedance (V_{CE} = −5v; I_E = 1 ma)	h_{ie}	2200	2600	3300	ohms
Current Gain (V_{CB} = −5v; I_E = 1 ma)	h_{fe}	70	84	112	
Thermal Characteristics					
Thermal Resistance Junction to Air		.33	.33	.33	°C/mw
Performance Data Common Emitter					
Power Gain Driver (V_{CC} = 9v)	G_p	39	41	43	db
Power Output	P_o	1	1	1	mw