The 2N64 is a hermetically sealed PNP junction transistor intended primarily for use in audio or low radio frequency applications. The tinned flexible leads may be soldered or welded directly to the terminals of circuit components without the use of sockets. Standard inline subminiature sockets may be used by cutting the leads to a suitable length.

MECHANICAL DATA

CASE: Metal and Glass
BASE: None (0.016" tinned flexible leads. Length: 1.5" min.
Spacing: Leads 1-4 0.144" center-to-center;
Other Leads 0.046" center-to-center)

TERMINAL CONNECTIONS:
Lead 1 Collector
Lead 4 Base
Lead 5 Emitter
MOUNTING POSITION: Any

ELECTRICAL DATA

RATINGS - ABSOLUTE MAXIMUM VALUES:
Collector Voltage \( (V_C) \) -15 volts
Peak Collector Voltage \( (V_C) \) -30 volts
Collector Current -10 ma.
Collector Dissipation *
Emitter Current 10 ma.
Ambient Temperature 85°C

AVERAGE CHARACTERISTICS: (at 27°C)
Collector Voltage -6 volts
Emitter Current 1.0 ma.
Collector Resistance 2.0 meg.
Base Resistance 700 ohms
Emitter Resistance 25 ohms
Base Current Amplification Factor 45
Cut-off Current (approx.) 6 μa.
Noise Factor (max.) 22 db

AVERAGE CHARACTERISTICS - COMMON Emitter: (at 27°C)
Collector Voltage -1.5 volts
Emitter Current 0.5 ma.
Input Resistance 2400 ohms
Load Resistance 20,000 ohms
Power Gain (Matched Input) 39 dB

AVERAGE CHARACTERISTICS - COMMON COLLECTOR: (at 27°C)
Collector Voltage -6 volts
Emitter Current 1.0 ma.
Input Resistance 2400 ohms
Load Resistance 20,000 ohms
Power Gain (Matched Input) 15 db.

AVERAGE CHARACTERISTICS - COMMON BASE: (at 27°C)
Collector Voltage -6 volts
Emitter Current 1.0 ma.
Input Resistance 70 ohms
Load Resistance 0.1 meg.
Power Gain (Matched Input) 31 db.

* This is the maximum operating temperature recommended. However, characteristic damage will not result from occasional exposures to storage temperatures up to 100°C.

• Measured under conditions for grounded emitter operation at \( V_{CB} = 2.5 \) volts for a 1 cycle bandwidth at 1000 cycles.

A Higher input impedances, without appreciable loss in gain, can be achieved by operating at lowered collector current.

* This is a function of maximum ambient temperature \( (T_A) \) expected. It is approximately equal to \( 1.7(85°C - T_A) \) milliwatts.

◆ In circuits stabilized for \( I_c \) or \( I_e \) and which do not have critical distortion requirements, absolute maximum peak voltage is 60 volts.

◆ Collector voltage \( V_{CE} \) at which \( I_C \) rises to 2 ma. in common emitter circuit with base lead connected directly to emitter lead. Ambient temperature \( = 25°C \).
GROUND BASE
Typical Collector Characteristics

GROUND EMMITTER
Typical Collector Characteristics

This family is a function of 1-a and thus changes appreciably with small changes in a.
GERMANIUM TRANSISTOR

TYPICAL CHARACTERISTICS AS A FUNCTION OF JUNCTION TEMPERATURE

Percent of Value at 27°C

Temperature - Degrees Centigrade

Arrows refer to positive electrode current flow.