



Excellence in Electronics

TYPE 2N64

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 0.048" center-to-center)

TERMINAL CONNECTIONS:

Lead 1 Collector
Lead 4 Base
Lead 5 Emitter

MOUNTING POSITION: Any

ELECTRICAL DATA

RATINGS - ABSOLUTE MAXIMUM VALUES:

Table with 2 columns: Parameter and Value. Includes Collector Voltage (-15 volts), Peak Collector Voltage (-30 volts), Collector Current (-10 ma), Collector Dissipation*, Emitter Current (10 ma), and Ambient Temperature (85 °C).

AVERAGE CHARACTERISTICS: (at 27°C)

Table with 2 columns: Parameter and Value. Includes 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), and Noise Factor (max.) (22 db).

AVERAGE CHARACTERISTICS - COMMON EMITTER: (at 27°C)

Table with 2 columns: Parameter and Value. Includes Collector Voltage (-1.5 volts), Emitter Current (0.5 ma), Input Resistance (2400 ohms), Load Resistance (20,000 ohms), and Power Gain (Matched Input) (39 db).

AVERAGE CHARACTERISTICS - COMMON COLLECTOR: (at 27°C)

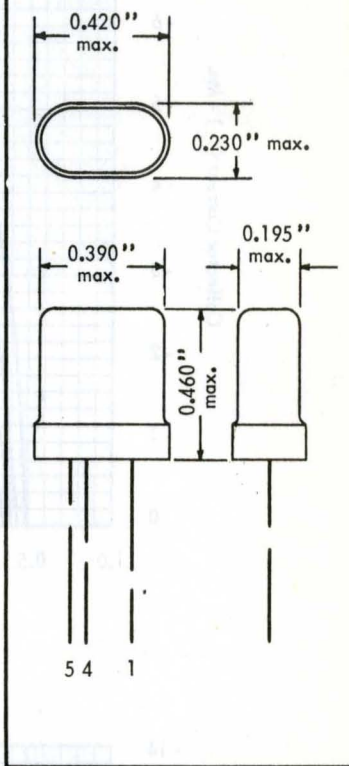
Table with 2 columns: Parameter and Value. Includes Collector Voltage (-6 volts), Emitter Current (1.0 ma), Input Resistance (0.6 meg), Load Resistance (20,000 ohms), and Power Gain (Matched Input) (15 db).

AVERAGE CHARACTERISTICS - COMMON BASE: (at 27°C)

Table with 2 columns: Parameter and Value. Includes Collector Voltage (-6 volts), Emitter Current (1.0 ma), Input Resistance (70 ohms), Load Resistance (0.1 meg), and 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 Vcb = -2.5 volts for a 1 cycle bandwidth at 1000 cycles.
▲ 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 (TA) expected. It is approximately equal to 1.7(85°C - TA) milliwatts.
⊕ In circuits stabilized for Ic or Ie and which do not have critical distortion requirements, absolute maximum peak voltage is 60 volts.
◆ Collector voltage Vce at which Ic rises to 2 ma. in common emitter circuit with base lead connected directly to emitter lead. Ambient temperature = 25°C.

Tentative Data

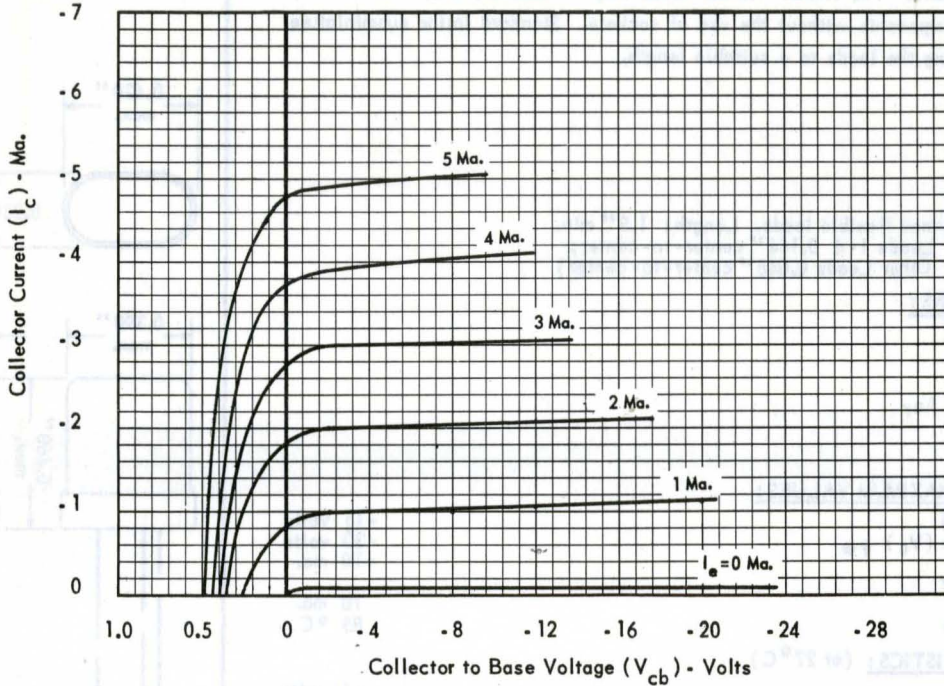


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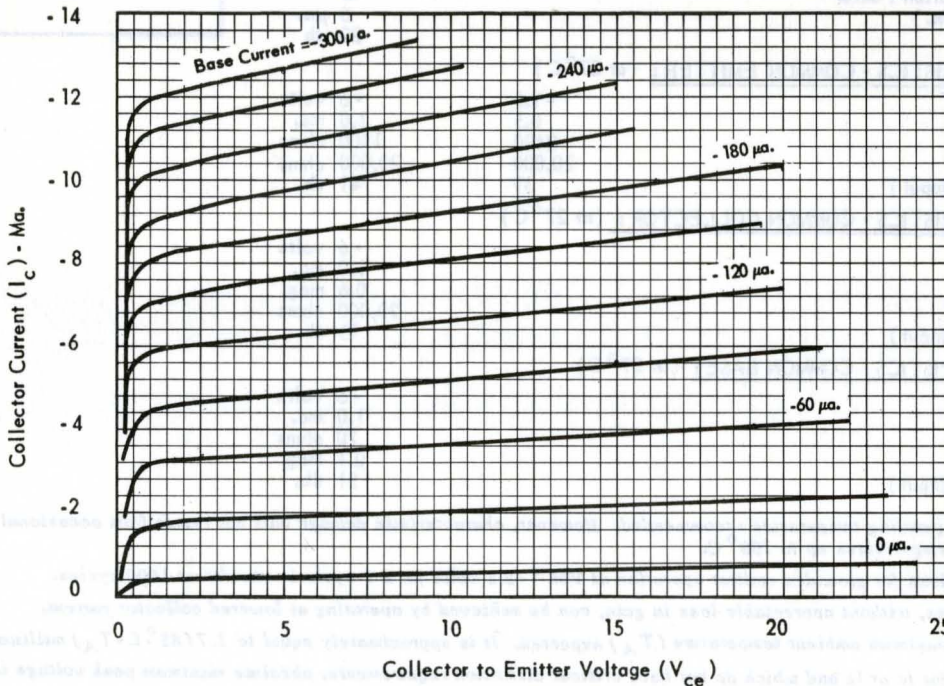
RECEIVING AND CATHODE RAY TUBE OPERATIONS



GROUNDING BASE
Typical Collector Characteristics



GROUNDING EMITTER
Typical Collector Characteristics

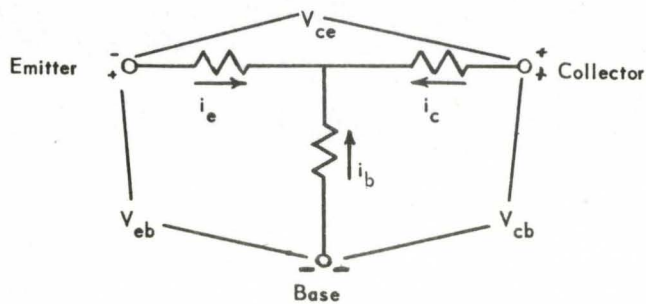
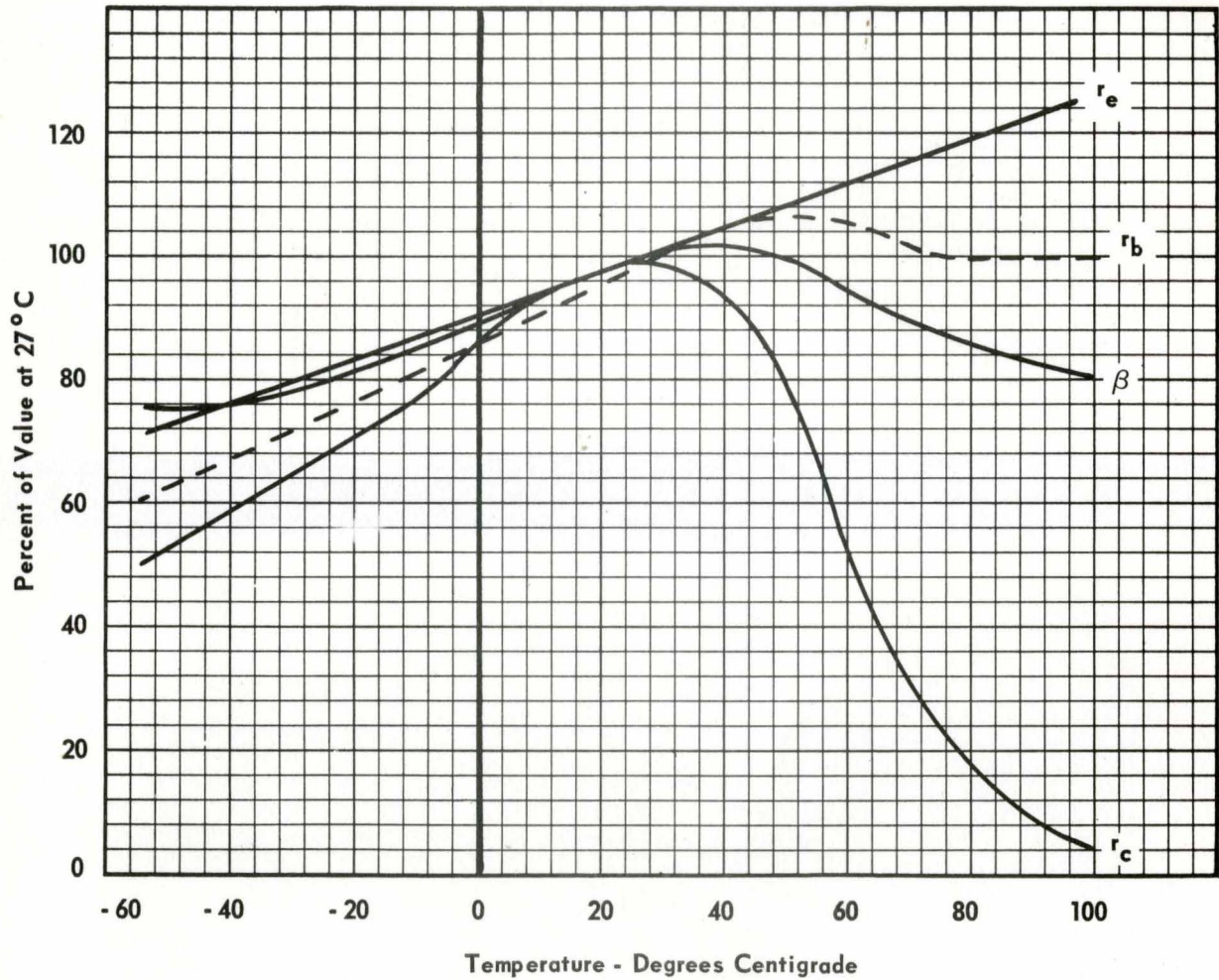


◆ This family is a function of $1-\alpha$ and thus changes appreciably with small changes in α .

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RECEIVING AND CATHODE RAY TUBE OPERATIONS

GERMANIUM TRANSISTOR

TYPICAL CHARACTERISTICS AS A FUNCTION OF JUNCTION TEMPERATURE



Arrows refer to positive electrode current flow.