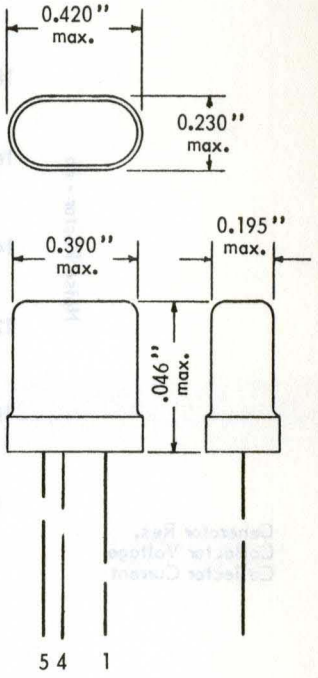
Excellence in Electronics

TYPE 2N106

The 2N106 is a hermetically sealed PNP junction transistor intended for use in low level audio applications where low noise factor is of prime importance. 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: Plastic and Glass

BASE: None (0.016" tinned flexible leads. Length: 1.5" min. Spacing: 0.08" center-to-center)

TERMINAL CONNECTIONS: *(Red Dot is adjacent to lead 1)*

Lead 1 Collector
Lead 2 Base
Lead 3 Emitter

WEIGHT: 0.025 ounces

MOUNTING POSITION: Any

ELECTRICAL DATA

RATINGS - ABSOLUTE MAXIMUM VALUES:

Collector Voltage	-6 volts
Collector Current	-10 ma.
Collector Dissipation *	
Emitter Current	10 ma.
Ambient Temperature	85 °C

CHARACTERISTICS: (at 27°C)

Collector Voltage	-1.5 volts
Collector Current	-0.5 ma.
Current Amplification Factor (min.)	25
Collector Resistance (min.)	1.0 meg.
Collector Cut off Current (max.) ■	12 μa.
Noise Factor (max.) ●▲	12 db

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

Collector Voltage	-1.5 volts
Collector Current	-0.5 ma.
Generator Resistance	1000 ohms
Load Resistance	20,000 ohms
Gain	36 db
Noise Factor ●	10 db

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

Collector Voltage	-1.5 volts
Collector Current	-0.5 ma.
Generator Resistance	100 ohms
Load Resistance	0.2 meg.
Gain	28 db
Noise Factor ●	10 db

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

Collector Voltage	-1.5 volts
Collector Current	-0.5 ma.
Generator Resistance	0.1 meg.
Load Resistance	10,000 ohms
Gain	14 db
Noise Factor ●	25 db

■ *With zero emitter current in grounded base connection.*

● *In a one-cycle bandwidth at 1000 cycles.*

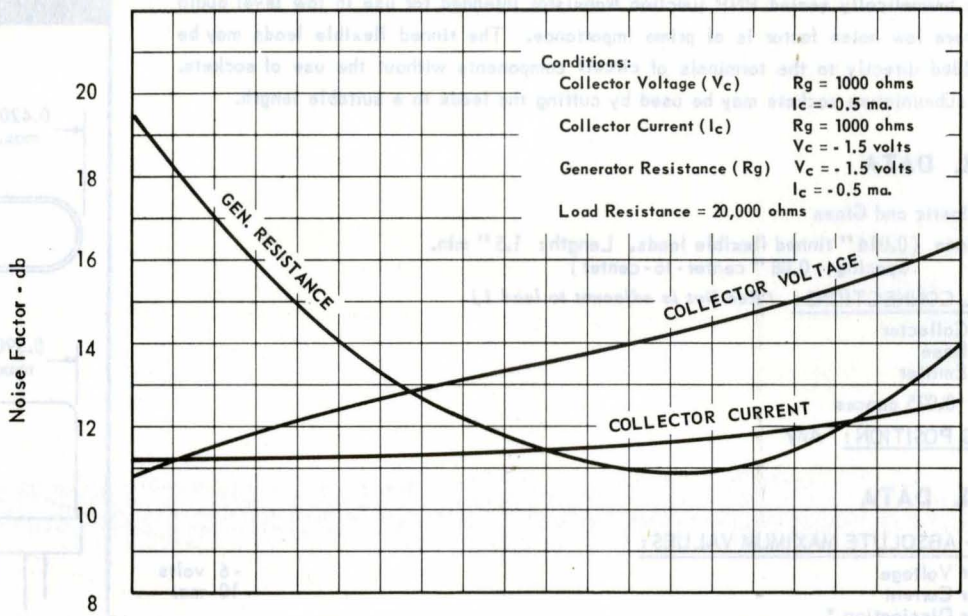
▲ *Measured under conditions described in 'Common Emitter Circuit'.*

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

Tentative Data

AVERAGE NOISE CHARACTERISTICS

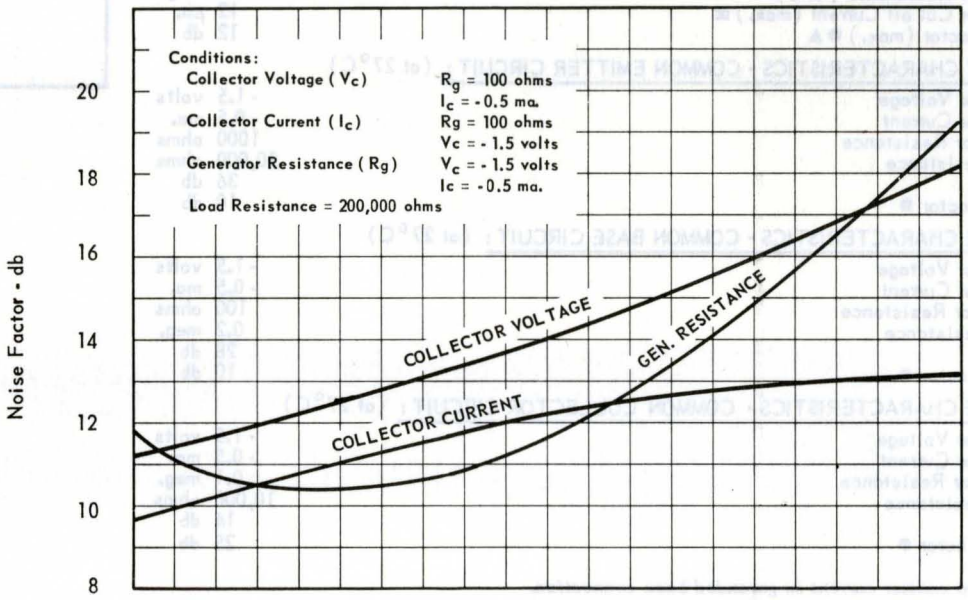
Common Emitter



Generator Res. 2.0 2.5 3.0 3.5 4.0 (log R_g) ohms
Collector Voltage 1 2 3 4 5 6 volts
Collector Current 0.2 0.4 0.6 0.8 1.0 ma.

AVERAGE NOISE CHARACTERISTICS

Common Base



Generator Res. 1.0 1.5 2.0 2.5 3.0 (log R_g) ohms
Collector Voltage 1 2 3 4 5 6 volts
Collector Current 0.2 0.4 0.6 0.8 1.0 ma.

AVERAGE NOISE CHARACTERISTICS
Common Collector