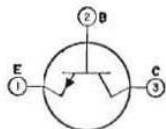


TRANSISTOR

2N1010



Germanium n-p-n type used in low-noise small-signal audio-frequency amplifier applications. It is used in input stages of audio-frequency amplifiers operating from extremely small input signals, such

as high-fidelity preamplifiers, tape-recorder amplifiers, microphone preamplifiers, and hearing aids, in which low noise is an important design consideration. JEDEC No. TO-18 package; outline 4, Outlines Section.

MAXIMUM RATINGS

| | | |
|---|-----------|-------|
| Collector-to-Base Voltage (with emitter open) | 10 max | volts |
| Collector-to-Emitter Voltage | 10 max | volts |
| Emitter-to-Base Voltage (with collector open) | 10 max | volts |
| Collector Current | 2 max | ma |
| Emitter Current | -2 max | ma |
| Transistor Dissipation: | | |
| At ambient temperatures up to 55°C | 20 max | mw |
| Ambient-Temperature Range: | | |
| Operating | -65 to 55 | °C |
| Storage | -65 to 85 | °C |

CHARACTERISTICS

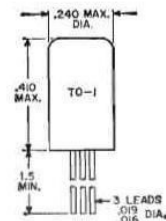
| | | |
|--|--------|----|
| Collector-Cutoff Current (with collector-to-base volts = 10 and emitter current = 0) | 10 max | µa |
| Emitter-Cutoff Current (with emitter-to-base volts = 2.5 and collector current = 0) | 6 max | µa |

In Common-Base Circuit

| | | |
|--|---|----|
| Small-Signal Forward-Current-Transfer-Ratio Cutoff Frequency (with collector-to-base volts = 3.5 and collector ma = 0.3) | 2 | Mc |
|--|---|----|

In Common-Emitter Circuit

| | | |
|---|----|----|
| Small-Signal Forward Current-Transfer Ratio at 1 kilocycle (with collector-to-emitter volts = 3.5 and collector ma = 0.3) | 35 | |
| Noise Figure (with generator resistance = 1000 ohms and integrated noise bandwidth = 15 kilocycles) | 5 | db |



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