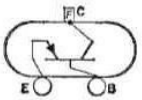
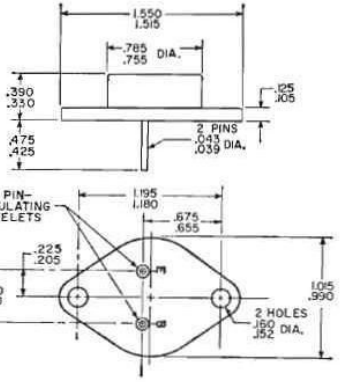
POWER TRANSISTOR



2N376

Germanium p-n-p type used in large-signal audio-frequency amplifier applications. It is used primarily in class A power-output stages and class B push-pull amplifier stages of automobile radio receivers. Package is similar to JEDEC No. TO-3; outline 23, Outlines Section. This type is identical with type 2N176 except for the following items:



CHARACTERISTICS

In Common-Emitter Circuit

Small-Signal Forward Current-Transfer Ratio at 1 kilocycle (with collector-to-emitter volts = −2 and collector amperes = −0.7)	60	
DC Forward Current-Transfer Ratio (with collector-to-emitter volts = −2 and collector amperes = −0.7)	78	
Small-Signal Input Resistance	16	ohms

TYPICAL OPERATION IN CLASS A POWER-AMPLIFIER CIRCUIT

Mounting-flange temperature of 80°C

DC Collector Supply Voltage	−14.4	volts
DC Collector-to-Emitter Voltage	−13.2	volts
DC Base-to-Emitter Voltage	−0.3	volt
Peak Collector Current	−1.4	amperes
Zero-Signal DC Collector Current	−0.7	ampere
Emitter Resistance	1	ohm
Load Impedance	15	ohms
Signal Frequency	1	kc
Signal-Source Impedance	10	ohms
Power Gain	35	db
Total Harmonic Distortion	5	per cent
Zero-Signal Transistor Dissipation	9.25	watts
Maximum-Signal Power Output	4	watts