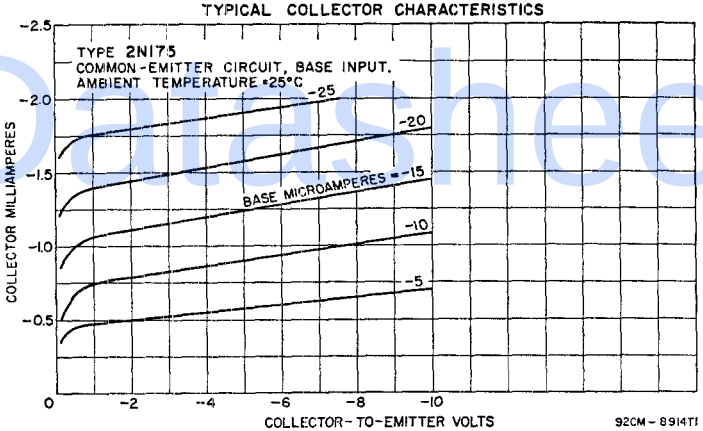
In Common-Base Circuit

Small-Signal Forward-Current-Transfer-Ratio Cutoff Frequency (with collector-to-base volts = −4 and collector ma = −0.5)	0.85	Mc

In Common-Emitter Circuit

Noise Figure (with collector-to-emitter volts = −4, collector ma = −0.5, and generator resistance = 1000 ohms)	6 *max*	db
Matched-Impedance Power Gain (with collector-to-emitter volts = −4, collector ma = −0.5, input resistance = 2000 ohms, and output resistance = 70000 ohms)	43	db

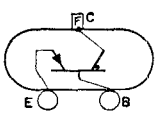
TYPICAL COLLECTOR CHARACTERISTICS



POWER TRANSISTOR

2N176

Germanium p-n-p type used in large-signal audio-frequency amplifier applications. It is used in class A power-output stages and class B push-pull amplifier stages in automobile radio receivers. Package is similar to JEDEC No. TO-3; outline 23, Outlines Section.



MAXIMUM RATINGS

COLLECTOR-TO-BASE VOLTAGE (with emitter open)	−40 *max*	volts
COLLECTOR CURRENT	−3 *max*	amperes
EMITTER CURRENT	3 *max*	amperes
TRANSISTOR DISSIPATION:		
At mounting-flange temperatures up to 80°C*	10 *max*	watts
MOUNTING-FLANGE-TEMPERATURE RANGE:		
Operating and storage	−65 to 90	°C

* This rating is reduced 1 watt/C° for mounting-flange temperatures above 80°C.

CHARACTERISTICS

Collector-to-Emitter Breakdown Voltage (with collector ma = −330 and base short-circuited to emitter)	−30 *min*	volts
Collector-Cutoff Current (with collector-to-base volts = −30 and emitter current = 0)	−3 *max*	ma
Emitter-Cutoff Current (with emitter-to-base volts = −10 and collector current = 0)	−2 *max*	ma
Thermal Resistance:		
Junction-to-ambient	1	°C/watt