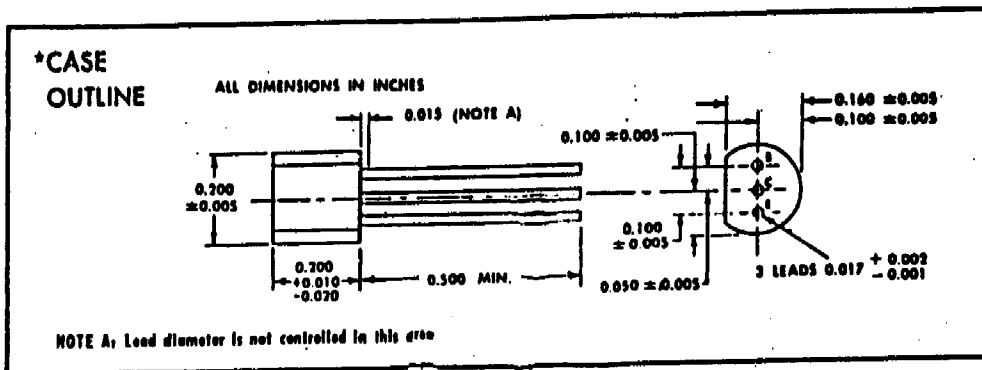


2N3702 P-N-P EPITAXIAL PLANAR SILICON TRANSISTORS

Encapsulated in Plastic For Such Applications As

- Medium-Power Amplifiers • Class B Audio Output • HI-FI Drivers



*absolute maximum ratings at 25°C free-air temperature (unless otherwise noted)

	2N3702
Collector-Base Voltage	-40 v
Collector-Emitter Voltage (See Note 1)	-25 v
Emitter-Base Voltage	-5 v
Collector Current	← -200 ma →
Continuous Device Dissipation at (or below) 25°C Free-Air Temperature (See Note 2)	← 300 mw →
Storage Temperature Range	-55°C to +150°C
Lead Temperature 1/8 Inch from Case for 10 Seconds	← 260°C →

NOTES: 1. This value applies when the base-emitter diode is open circuited.
2. Derate linearly to 125°C free-air temperature at the rate of 3 mw/°C.
*Indicates JEDEC registered data.

*electrical characteristics at 25°C free-air temperature

PARAMETER	TEST CONDITIONS	2N3702		UNIT
		MIN	MAX	
$V_{(BR)CBO}$ Collector-Base Breakdown Voltage	$I_C = -100 \mu A, I_E = 0$	-40		v
$V_{(BR)CEO}$ Collector-Emitter Breakdown Voltage	$I_C = -10 \text{ ma}, I_B = 0$, See Note 3	-25		v
$V_{(BR)EBO}$ Emitter-Base Breakdown Voltage	$I_E = -100 \mu A, I_C = 0$	-5		v
I_{CBO} Collector Cutoff Current	$V_{CB} = -20 \text{ v}, I_E = 0$		-100	na
I_{EBO} Emitter Cutoff Current	$V_{EB} = -3 \text{ v}, I_C = 0$		-100	na
h_{FE} Static Forward Current Transfer Ratio	$V_{CE} = -5 \text{ v}, I_C = -50 \text{ ma}$, See Note 3	60	300	
V_{BE} Base-Emitter Voltage	$V_{CE} = -5 \text{ v}, I_C = -50 \text{ ma}$, See Note 3	-0.6	-1	v
$V_{CE(sat)}$ Collector-Emitter Saturation Voltage	$I_B = -5 \text{ ma}, I_C = -50 \text{ ma}$, See Note 3	-0.25		v
f_T Transition Frequency	$V_{CE} = -5 \text{ v}, I_C = -50 \text{ ma}$, See Note 4	100		Mc
C_{obe} Common-Base Open-Circuit Output Capacitance	$V_{CB} = -10 \text{ v}, I_E = 0, f = 1 \text{ Mc}$		12	pf

NOTES: 3. These parameters must be measured using pulse techniques. PW = 300 μsec, Duty Cycle ≤ 2%.
4. To obtain f_T , the h_{fe} response with frequency is extrapolated at the rate of -4 db per octave from $f = 20 \text{ Mc}$ to the frequency at a