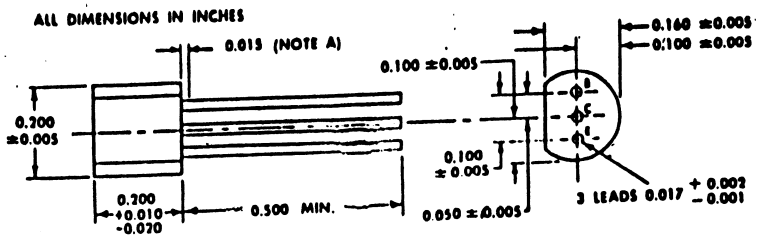
2N3702 P-N-P EPITAXIAL PLANAR SILICON TRANSISTORS

Encapsulated in Plastic For Such Applications As

• Medium-Power Amplifiers • Class B Audio Output • Hi-Fi Drivers

*CASE OUTLINE



NOTE A: Lead diameter is not controlled in this area

*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 1/16 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 MIN	2N3702 MAX	UNIT
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C = -100\ \mu a$, $I_E = 0$	−40		v
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -10$ 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	$V_{CB} = -20$ v, $I_E = 0$		−100	na
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -3$ v, $I_C = 0$		−100	na
h_{FE}	Static Forward Current Transfer Ratio	$V_{CE} = -5$ v, $I_C = -50$ ma, See Note 3	60	300	
V_{BE}	Base-Emitter Voltage	$V_{CE} = -5$ v, $I_C = -50$ ma, See Note 3	−0.6	−1	v
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_B = -5$ ma, $I_C = -50$ ma, See Note 3		−0.25	v
f_T	Transition Frequency	$V_{CE} = -5$ v, $I_C = -50$ ma, See Note 4	100		Mc
C_{obo}	Common-Base Open-Circuit Output Capacitance	$V_{CB} = -10$ v, $I_E = 0$, f = 1 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 −6 db per octave from f = 20 Mc to the frequency at w