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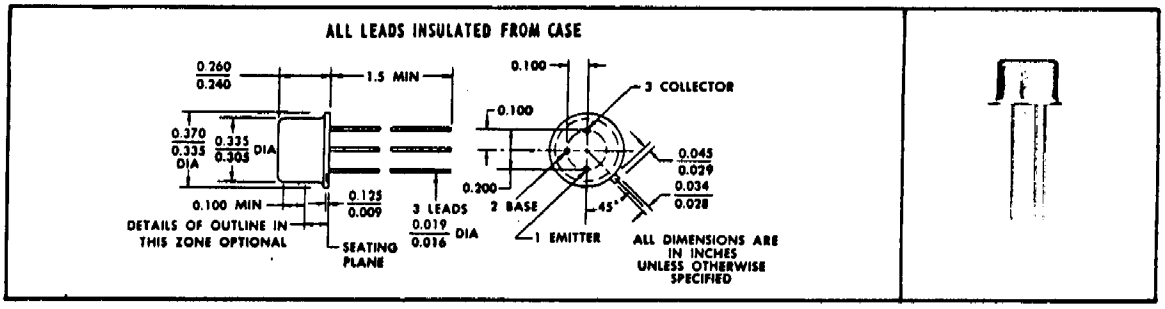
TYPE 2N336

N-P-N GROWN JUNCTION SILICON TRANSISTOR

mechanical data

Welded case with glass-to-metal hermetic seal between case and leads. Unit weight is approximately 1 gram. All JEDEC TO-5 dimensions and notes are applicable.



absolute maximum ratings at 25°C ambient [except where advanced temperatures are indicated]

Collector Voltage Referred to Base	45 V
Emitter Voltage Referred to Base	1 V
Collector Current	25 mA
Emitter Current	−25 mA
Device Dissipation	150 mW
at 100°C	100 mW
at 150°C	50 mW

junction temperature

Maximum Range	−65°C to +175°C

common base design characteristics at $T_j = 25°C$ [except where advanced temperatures are indicated]

		test conditions		min.	design center	max.	unit
BV_{CBO}	Collector Breakdown Voltage	$I_C = 50\mu A$	$I_E = 0$	45	—	—	Volt
I_{CBO}	Collector Cutoff Current	$V_{CB} = 30V$	$I_E = 0$	—	—	2	μA
	at 100° C	$V_{CB} = 5V$	$I_E = 0$	—	—	10	μA
	at 150° C	$V_{CB} = 5V$	$I_E = 0$	—	—	50	μA
h_{ib}†	Input Impedance	$V_{CB} = 5V$	$I_E = -1mA$	30	55	80	Ohm
h_{ob}†	Output Admittance	$V_{CB} = 5V$	$I_E = -1mA$	0.0	0.25	1.2	μmho
h_{rb}†	Feedback Voltage Ratio	$V_{CB} = 5V$	$I_E = -1mA$	0.0	700	1000	$X10^{-6}$
h_{fb}†	Current Transfer Ratio	$V_{CB} = 5V$	$I_E = -1mA$	−0.987	−0.99	−0.997	—
NF	Noise Figure*‡	$V_{CB} = 5V$	$I_E = -1mA$	—	20	30	db
$f_{\alpha b}$	Frequency Cutoff	$V_{CB} = 5V$	$I_E = -1mA$	2	13	—	mc
C_{ob}	Output Capacitance (1mc)	$V_{CB} = 5V$	$I_E = -1mA$	—	10	30	$\mu\mu f$
R_{CS}	Saturation Resistance*	$I_B = 2.2mA$	$I_C = 5mA$	—	70	200	Ohm

*Common Emitter † f=1kc ‡Conventional Noise—Compared to 1000 ohm resistor, 1000 cps and 1 cycle band width