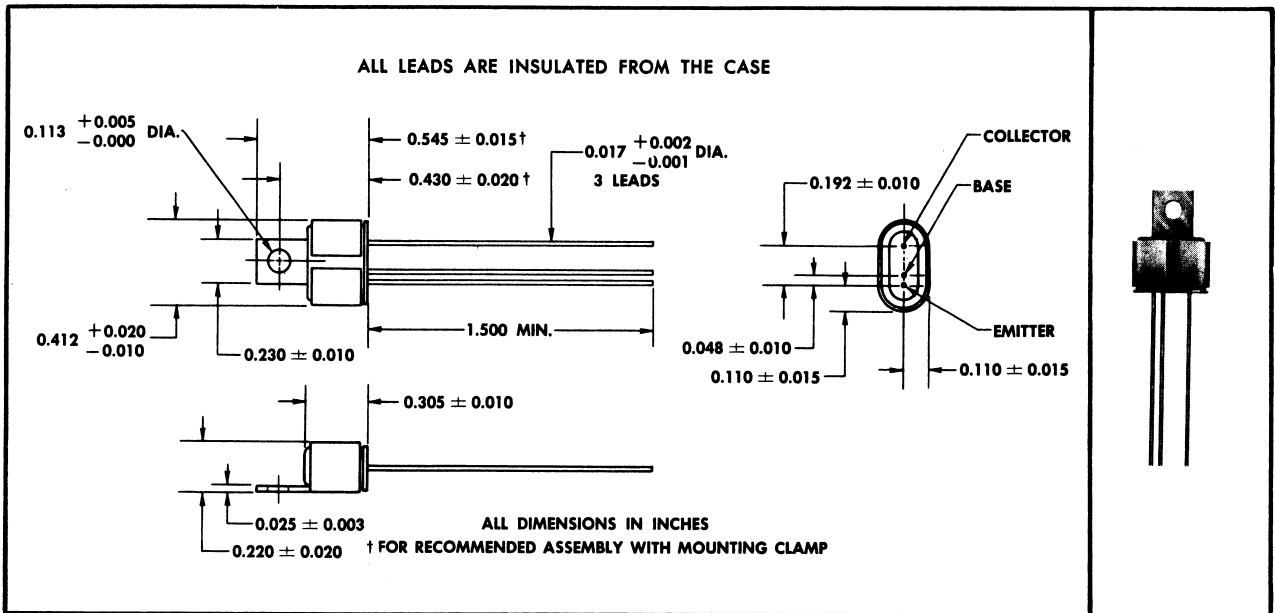


TYPES 2N243, 2N244
N-P-N GROWN SILICON TRANSISTORS

Oval Welded Package

mechanical data

The transistor is in an oval welded package with glass-to-metal hermetic seal between case and leads. Unit weight is approximately 1 gram. The mounting clip is hardware supplied with the transistor.

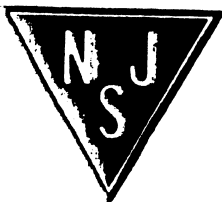


***absolute maximum ratings at 25°C case temperature (unless otherwise noted)**

Collector-Base Voltage	60 v
Collector Current	60 ma
Total Device Dissipation (see note 1)	750 mw
Collector Junction Operating Temperature	+150°C
Storage Temperature Range	-55° to +150°C

NOTE: 1. Derate linearly to 150°C case temperature at the rate of 6 mw/°C.

†Indicates JEDEC registered data.



NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

electrical characteristics at 25°C case temperature (unless otherwise noted)

parameter	test conditions	types	min*	typ	max*	unit
I_{CBO} Collector Cutoff Current	$V_{CB} = 30 \text{ v}, I_E = 0$	All			1	μa
I_{CEO} Collector Cutoff Current	$V_{CB} = 30 \text{ v}, I_E = 0$ $T_C = 150^\circ\text{C}$	All		15		μa
BV_{CBO} Collector-Base Breakdown Voltage	$I_C = 50 \mu\text{a}, I_E = 0$	All	60			v
BV_{CEO} Collector-Emitter Breakdown Voltage	$I_C = 100 \mu\text{a}, I_B = 0$	All		60		v
V_{BE} Base-Emitter Voltage	$I_B = 3 \text{ ma}, I_C = 20 \text{ ma}$	All			1	v
$r_{CE(sat)}$ DC Collector-Emitter Saturation Resistance	$I_B = 3 \text{ ma}, I_C = 20 \text{ ma}$	All			350	ohm
h_{fb} AC Common-Base Forward Current Transfer Ratio	$V_{CB} = 10 \text{ v}, I_E = -5 \text{ ma}$ $f = 1 \text{ kc}$	2N243 2N244	-0.9 -0.961	-0.94 -0.97	-0.968 -0.989	—
h_{ib} AC Common-Base Input Impedance	$V_{CB} = 10 \text{ v}, I_E = -5 \text{ ma}$ $f = 1 \text{ kc}$	All		12	30	ohm
h_{rb} AC Common-Base Reverse Voltage Transfer Ratio	$V_{CB} = 10 \text{ v}, I_E = -5 \text{ ma}$ $f = 1 \text{ kc}$	All		60×10^{-6}	300×10^{-6}	—

functional tests at 25°C case temperature

G_{pe} Common-Emitter Power Gain (See Circuit Below)	$V_{CB} = 28 \text{ v}$ $R_g = 100 \Omega$ $f = 1 \text{ kc}$	$I_C = 20 \text{ ma}$ $R_L = 1 \text{ K}\Omega$ $V_g = 0.2 \text{ v}$	All	30			db
---	---	---	-----	----	--	--	----

