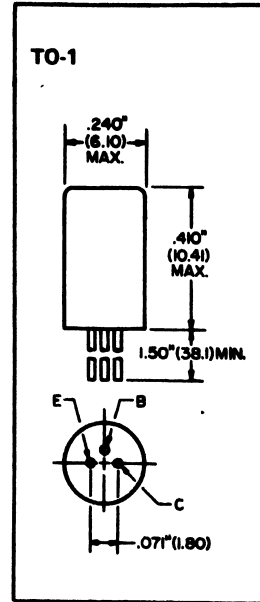


**2N200**  
**P-N-P GERMANIUM TRANSISTOR**

**Transistor Outline**



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

Collector-Base Voltage . . . . .	25 v
Emitter-Base Voltage . . . . .	25 v
Collector Current . . . . .	300 ma
Total Device Dissipation at (or below) 25°C	150 mw
Operating Collector Junction Temperature .	85°C
Storage Temperature Range . . . . .	-65°C to 100°C

**electrical characteristics at 25°C free-air temperature**

PARAMETER	TEST CONDITIONS	2N200			UNIT
		MIN	TYP	MAX	
$V_{CBO}$ Collector-Base Breakdown Voltage	$I_C = 100 \mu a, I_E = 0$	25			v
$V_{EBO}$ Emitter-Base Breakdown Voltage	$I_E = 100 \mu a, I_C = 0$	25			v
$V_{PT}$ Punch Through Voltage†	$V_{EB} = 1 v$	25			v
$I_{CBO}$ Collector Cutoff Current	$V_{CB} = 25 v, I_E = 0$		3	50	$\mu a$
$I_{EBO}$ Emitter Cutoff Current	$V_{EB} = 25 v, I_C = 0$		2	50	$\mu a$
$h_{FE}$ Static Forward Current Transfer Ratio	$V_{CE} = 1 v, I_C = 10 ma$	20	100		
	$V_{CE} = 0.35 v, I_C = 200 ma$	10	100		
$V_{CE(sat)}$ Collector-Emitter Saturation Voltage	$I_B = 0.5 ma, I_C = 10 ma$	0.15	0.22	0.40	v
	$I_B = 0.5 ma, I_C = 10 ma$		0.07	0.20	v
	$I_B = 0.25 ma, I_C = 10 ma$				v
	$I_B = 0.17 ma, I_C = 10 ma$				v
	$I_B = 0.13 ma, I_C = 10 ma$				v