



Micro Commercial Components
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2SA1980

Features

- Low Collector Saturation Voltage: $V_{CE(sat)}=0.3V(\text{Max.})$
- Low Output Capacitance: $C_{ob}=4.0pF(\text{Typ.})$
- Complementary Pair With 2SC5343
- Marking Code: A1980

PNP Silicon Transistors

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	50	V
V_{CBO}	Collector-Base Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5.0	V
I_C	Collector Current	150	mA
P_C	Collector power dissipation	625	mW
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 to +150	°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
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OFF CHARACTERISTICS

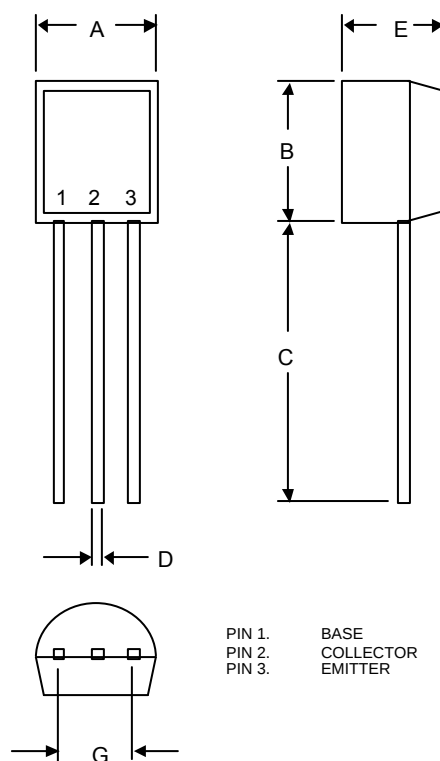
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=100\mu\text{Adc}$, $I_B=0$)	50	---	---	Vdc
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ($I_C=10\text{mAdc}$, $I_B=0$)	50	---	---	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_E=10\mu\text{Adc}$, $I_C=0$)	5.0	---	---	Vdc
I_{CBO}	Collector-Base Cutoff Current ($V_{CB}=50\text{Vdc}$, $I_E=0$)	---	---	0.1	μAdc
I_{EBO}	Emitter-Base Cutoff Current ($V_{EB}=5.0\text{Vdc}$, $I_C=0$)	---	---	0.1	μAdc

ON CHARACTERISTICS

h_{FE}	Forward Current Transfer ratio* ($I_C=2.0\text{Adc}$, $V_{CE}=6.0\text{Vdc}$)	70	---	700	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=100\text{mAdc}$, $I_B=10\text{mAdc}$)	---	---	0.3	Vdc
f_T	Transition Frequency ($V_{CE}=10\text{Vdc}$, $I_C=1.0\text{mAdc}$)	80	---	---	MHz
C_{ob}	Collector Output Capacitance ($V_{CB}=10\text{Vdc}$, $I_E=0$, $f=1.0\text{MHz}$)	---	4.0	7.0	pF
NF	Noise Figure ($V_{CE}=6.0\text{Vdc}$, $I_C=0.1\text{mAdc}$, $f=1.0\text{KHz}$, $R_g=10K\Omega$)	---	---	10	dB

* h_{FE} rank / O: 70-140, Y:120-240, G:200-400, L:300-700

TO-92



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.175	.185	4.45	4.70	
B	.175	.185	4.46	4.70	
C	.500	---	12.7	---	
D	.016	.020	0.41	0.63	
E	.135	.145	3.43	3.68	
G	.095	.105	2.42	2.67	