



Micro Commercial Components



Micro Commercial Components  
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**2SA1980-O**  
**2SA1980-Y**  
**2SA1980-G**  
**2SA1980-L**

## PNP Silicon Transistors

### Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Low Collector Saturation Voltage:  $V_{CE(sat)}=0.3V(\text{Max.})$
- Low Output Capacitance:  $C_{ob}=4.0pF(\text{Typ.})$
- Complementary Pair With 2SC5343
- Halogen free available upon request by adding suffix "-HF"
- Marking : A1980
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

### 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	$^{\circ}C$
$T_{STG}$	Storage Temperature	-55 to +150	$^{\circ}C$

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
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#### OFF CHARACTERISTICS

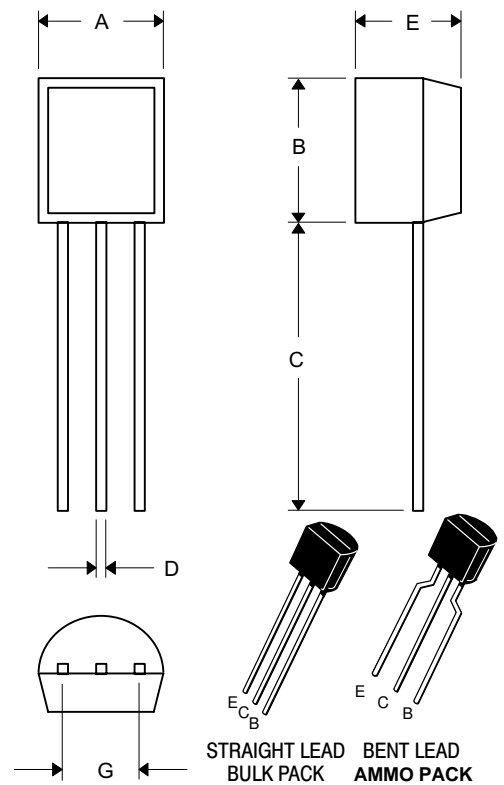
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ( $I_C=100\mu\text{Adc}$ , $I_B=0$ )	50	---	---	Vdc
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ( $I_C=10\text{mAdc}$ , $I_B=0$ )	50	---	---	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ( $I_E=10\mu\text{Adc}$ , $I_C=0$ )	5.0	---	---	Vdc
$I_{CBO}$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

#### 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 ( $V_{CE}=6.0\text{Vdc}$ , $I_C=0.1\text{mAdc}$ , $f=1.0\text{KHz}$ , $R_g=10\text{K}\Omega$ )	---	---	10	dB

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

### TO-92



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.175	.185	4.45	4.70	
B	.175	.185	4.45	4.70	
C	.500	---	12.70	---	
D	.016	.020	0.41	0.63	
E	.135	.145	3.43	3.68	
G	.095	.105	2.42	2.67	Straight Lead
	.173	.220	4.40	5.60	Bent Lead

\* For ammo packing detailed specification, click here to visit our website of product packaging for details.

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### Ordering Information :

Device	Packing
Part Number-AP	Ammo Packing: 20Kpcs/Carton
Part Number-BP	Bulk: 100Kpcs/Carton

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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