



Micro Commercial Components



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2SC1959-O
2SC1959-Y
2SC1959-GR

Power Silicon
NPN Transistor

Features

- Audio frequency low power amplifier applications, driver stage amplifier applications, switching applications
- Excellent h_{FE} Linearity: $h_{FE(2)} = 25(\text{Min.}) : V_{CE}=6.0V, I_C=400\text{mA}$
- 1 Watt Amplifier applications
- Complementary to 2SA562TM.
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking: C1959
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	30	V
V_{CBO}	Collector-Base Breakdown Voltage	35	V
V_{EBO}	Emitter-Base Voltage	5.0	V
I_C	Collector Current	500	mA
I_B	Base Current	100	mA
P_C	Collector Power Dissipation	500	mW
T_J	Operating Junction Temperature	-55 to +150	$^{\circ}\text{C}$
T_{STG}	Storage Temperature	-55 to +150	$^{\circ}\text{C}$

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
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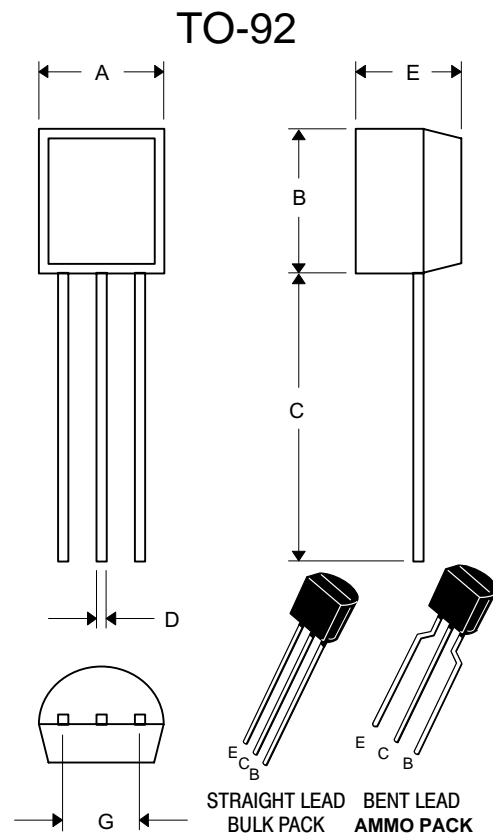
OFF CHARACTERISTICS

I_{CBO}	Collector-Base Cutoff Current ($V_{CB}=35V_{dc}, I_E=0$)	---	---	0.1	μA
I_{EBO}	Emitter-Base Cutoff Current ($V_{EB}=5.0V_{dc}, I_C=0$)	---	---	0.1	μA

ON CHARACTERISTICS

h_{FE-1}	DC Current Gain* ($I_C=100\text{mA}, V_{CE}=1.0V_{dc}$)	70	---	400	---
h_{FE-2}	DC Current Gain* ($I_C=400\text{mA}, V_{CE}=6.0V_{dc}$)	25	---	---	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=100\text{mA}, I_B=10\text{mA}$)	---	0.1	0.25	Vdc
V_{BE}	Base-Emitter Voltage ($I_C=100\text{mA}, V_{CE}=1.0V_{dc}$)	---	0.8	1.0	Vdc
f_T	Transition Frequency ($V_{CE}=6.0V_{dc}, I_C=20\text{mA}$)	200	300	---	MHz
C_{OBO}	Collector Output Capacitance ($V_{CB}=6.0V_{dc}, I_E=0, f=1.0\text{MHz}$)	---	7.0	---	pF

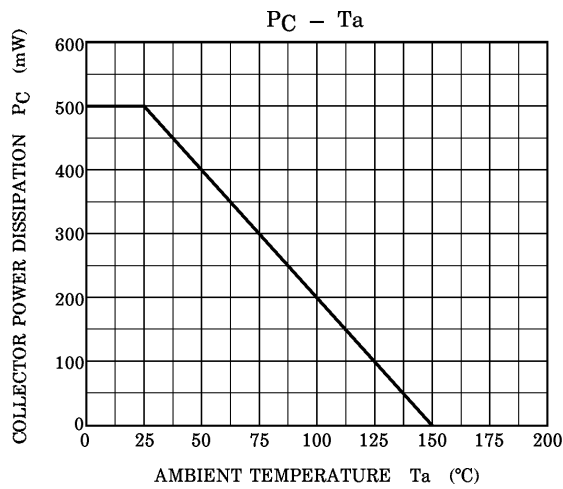
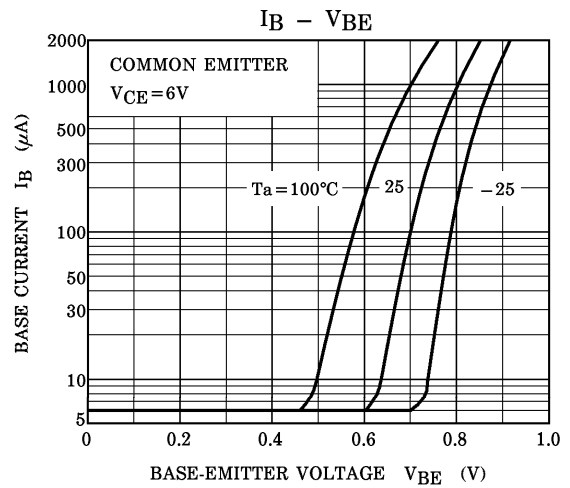
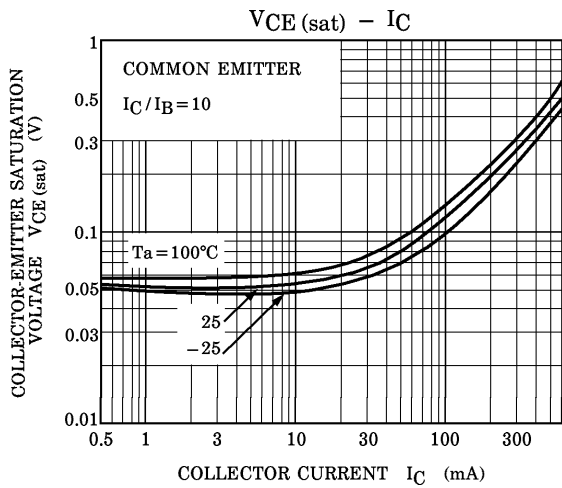
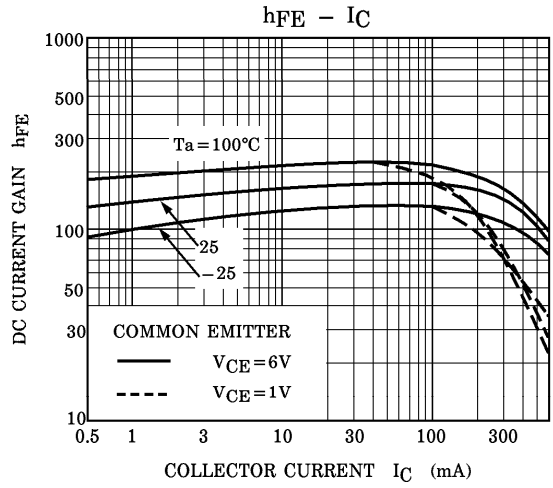
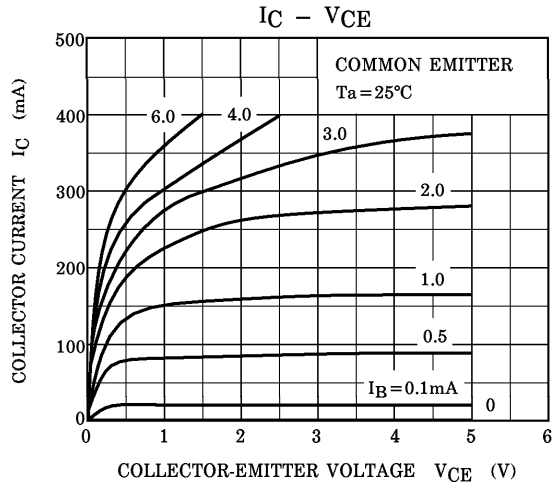
Note: $h_{FE(1)}$ Classification O: 70~140, Y: 120~240, GR: 200~400
 $h_{FE(2)}$ Classification O: 25 (Min.), Y: 40 (Min.)



DIM	DIMENSIONS				NOTE
	INCHES		MM		
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.

2SC1959





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Ordering Information :

Device	Packing
Part Number-AP	Ammo Packing: 2Kpcs/Ammo Box
Part Number-BP	Bulk: 100Kpcs/Carton

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

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