



Micro Commercial Components

Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

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

Features

- Audio frequency low power amplifier applications, driver stage amplifier applications, switching applications
- Excellent h_{FE} Linearity: $h_{FE(2)} = 25(\text{Min.})$; $V_{CE} = 6.0V$, $I_C = 400mA$
- 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)

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

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
--------	-----------	-----	-----	-----	-------

OFF CHARACTERISTICS

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

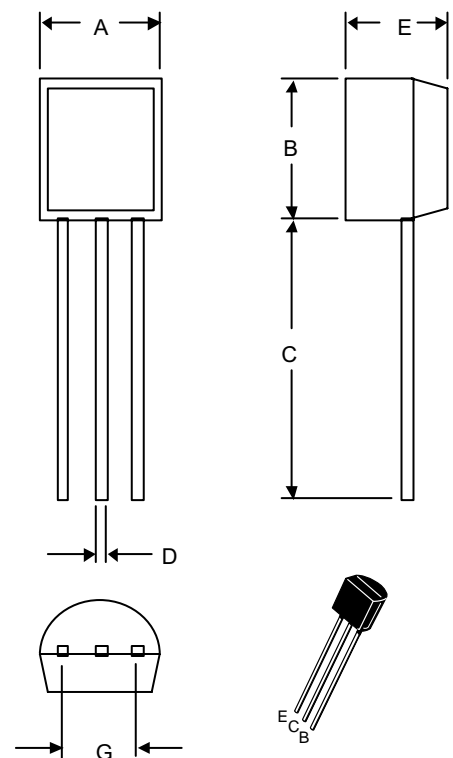
ON CHARACTERISTICS

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

**Power Silicon
NPN Transistor**

TO-92

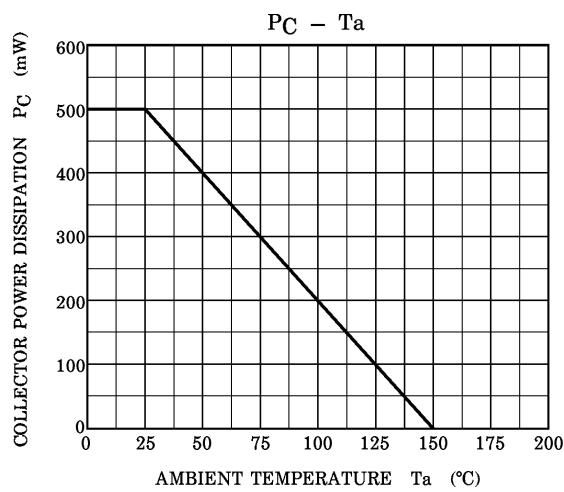
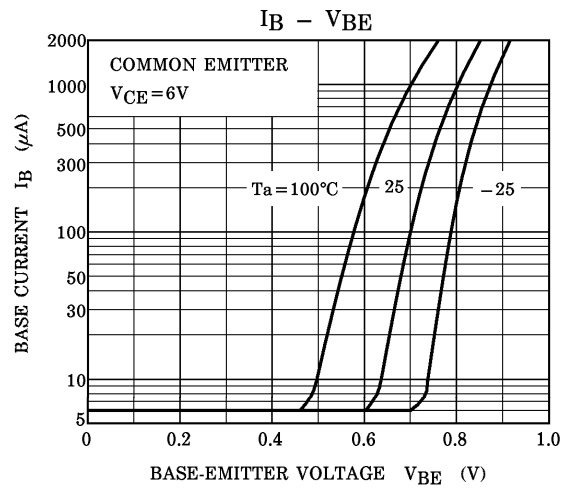
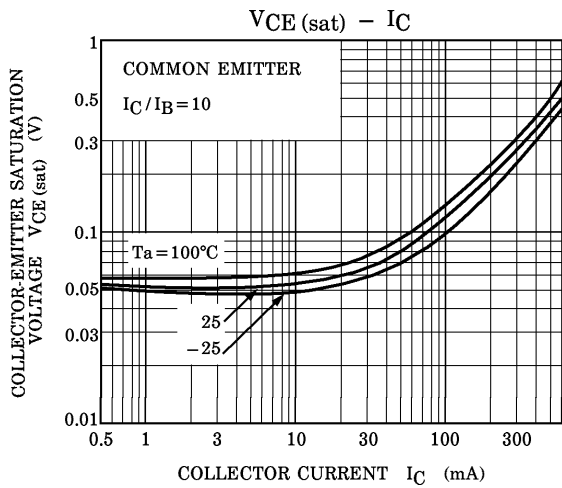
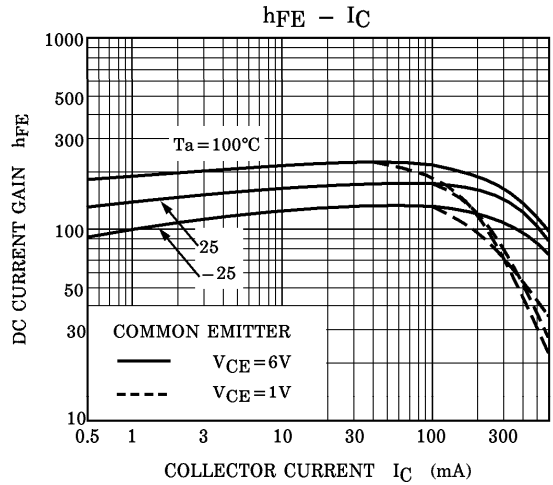
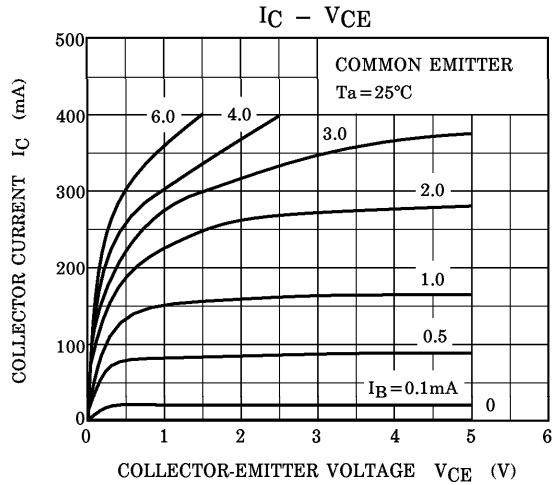


DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.170	.190	4.33	4.83	
B	.170	.190	4.30	4.83	
C	.550	.590	13.97	14.97	
D	.010	.020	0.36	0.56	
E	.130	.160	3.30	3.96	
G	.096	.104	2.44	2.64	

2SC1959



Micro Commercial Components





Micro Commercial Components

Ordering Information :

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

*****IMPORTANT NOTICE*****

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp.** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp.** and all the companies whose products are represented on our website, harmless against all damages.

*****LIFE SUPPORT*****

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

*****CUSTOMER AWARENESS*****

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

www.mccsemi.com