

MPSA06

NPN Small Signal Transistor 625 mW

Features

- NPN Silicon Epitaxial Planar Transistor for switching and amplifier applications
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- As complementary type, the PNP transistor is MPSA56
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

Mechanical Data

- Marking: MPSA06
- Weight: 0.18 grams (Approx.)

Maximum Ratings @ 25°C Unless Otherwise Specified

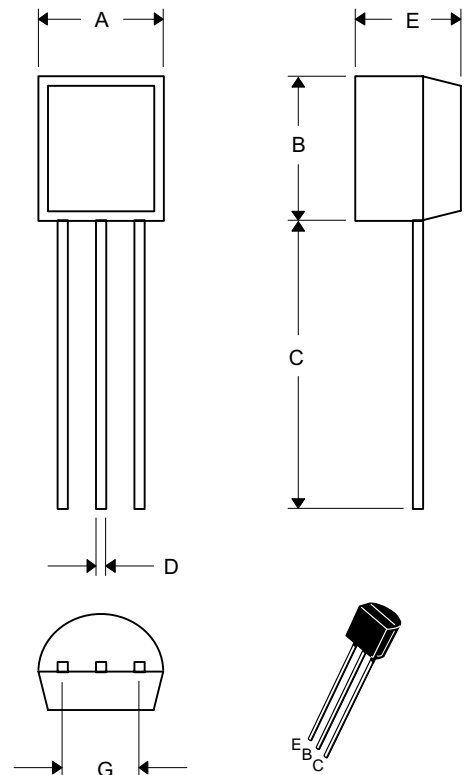
Characteristic	Symbol	Value	Unit
Collector to Base Voltage	V_{CBO}	80	V
Collector to Emitter Voltage	V_{CEO}	80	V
Emitter to Base Voltage	V_{EBO}	4.0	V
Collector Current	I_C	500	mA
Total Power Dissipation @ $T_A=25^\circ\text{C}$	P_{tot}	625	mW
Total Power Dissipation @ $T_C=25^\circ\text{C}$	P_{tot}	1.5	W
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	200	$^\circ\text{C/W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 to 150	$^\circ\text{C}$

Electrical Characteristics @ 25°C Unless Otherwise Specified

Characteristic	Symbol	Min	Max	Unit	Test Cond.
Collector Cut-off Current	I_{CBO}		100	nA	$V_{CB}=80\text{V}, I_E=0$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$		0.25	V	$I_C=100\text{mA}, I_B=10\text{mA}$
DC Current Gain	h_{FE}	100	100		$V_{CE}=1\text{V}, I_C=10\text{mA}$ $V_{CE}=1\text{V}, I_C=100\text{mA}$
Gain Bandwidth Product	f_T	100		MHZ	$V_{CE}=2\text{V}, I_C=20\text{mA}, f=100\text{MHZ}$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	80		V	$I_C=1\text{mA}, I_B=0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	4		V	$I_E=100\mu\text{A}, I_C=0$
Base-Emitter ON Voltage	$V_{BE(ON)}$		1.2	V	$I_C=10\text{mA}, I_B=1\text{mA}$

Note: Valid provided that leads are kept at ambient temperature.

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	



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