



Micro Commercial Components

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MPSA55 MPSA56

Features

- Capable of 1.5Watts of Power Dissipation.
- Collector-current 500mA
- Collector-base Voltage 80V
- Operating and storage junction temperature range: -55°C to +150°C
- Marking: MPSA55, MPSA56
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

Maximum Ratings

Symbol	Rating	Rating	Unit
V _{CEO}	Collector-Emitter Voltage	80	V
V _{CBO}	Collector-Base Voltage	80	V
V _{EBO}	Emitter-Base Voltage	4.0	V
I _c	Collector Current Continuous	500	mA
P _D	Total Device Dissipation @T _A =25°C Derate above 25°C	625 5.0	mW mW/°C
P _D	Total Device Dissipation @T _A =25°C Derate above 25°C	1.5 12	W mW/°C
T _J	Junction Temperature	-55 to +150	°C
T _{STG}	Storage Temperature	-55 to +150	°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
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OFF CHARACTERISTICS

V _{(BR)CEO}	Collector-Emitter Breakdown Voltage ⁽¹⁾ (I _c =1.0mA, I _b =0)	MPSA55 80	60	Vdc
V _{(BR)EBO}	Emitter-Base Breakdown Voltage (I _e =100uAdc, I _c =0)		4.0	Vdc
I _{CES}	Collector Cutoff Current (V _{CE} =60Vdc, I _b =0)		0.1	uAdc
I _{CBO}	Collector Cutoff Current (V _{CB} =60Vdc, I _e =0) (V _{CB} =80Vdc, I _e =0)	MPSA55 MPSA56	0.1 0.1	uAdc

ON CHARACTERISTICS ⁽¹⁾

h _{FE(1)}	DC Current Gain (I _c =10mA, V _{CE} =1.0Vdc)	100		
h _{FE(2)}	DC Current Gain (I _c =100mA, V _{CE} =1.0Vdc)	100		
V _{CE(sat)}	Collector-Emitter Saturation Voltage (I _c =100mA, I _b =10mA)		0.25	Vdc
V _{BE(on)}	Base-Emitter Saturation Voltage (I _c =100mA, V _{CE} =1.0Vdc)		1.2	Vdc

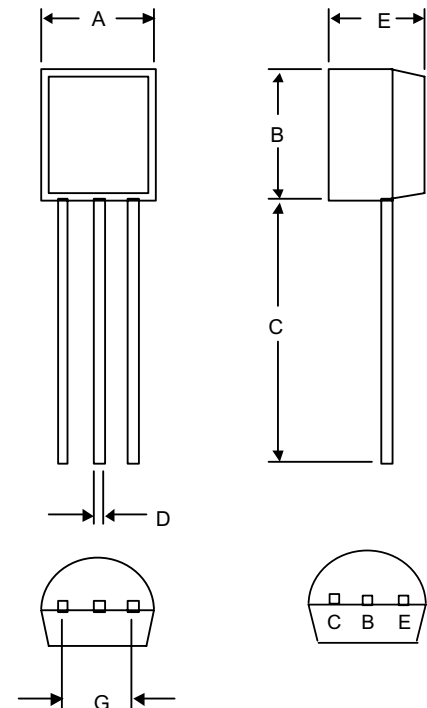
SMALL-SIGNAL CHARACTERISTICS

f _T	Current Gain – Bandwidth Product ⁽³⁾ (I _c =100mA, V _{CE} =1.0Vdc, f=100MHz)	MPSA55 MPSA56	50	MHz
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1. Pulse Test: Pulse Width<300us, Duty Cycle<2.0%
2. f_T is defined as the frequency at which |h_{fe}| extrapolates to unity.

PNP Silicon Amplifier 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	.010	.104	2.44	2.64	



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Ordering Information

Device	Packing
(Part Number)-AP	Tape&Reel;2Kpcs/Box
(Part Number)-BP	Bulk;1Kpcs/Bag

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