

**MPSA55
MPSA56**

Features

- Halogen free available upon request by adding suffix "-HF"
- 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)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 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	625	mW
	Derate above 25°C	5.0	mW/°C
P _D	Total Device Dissipation @T _C =25°C	1.5	W
	Derate above 25°C	12	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 MPSA56	60 80	Vdc
V _{(BR)EBO}	Emitter-Base Breakdown Voltage (I _E =100µA, I _C =0)		4.0	Vdc
I _{CES}	Collector Cutoff Current (V _{CE} =60Vdc, I _B =0)		0.1	µAdc
I _{CBO}	Collector Cutoff Current (V _{CB} =60Vdc, I _E =0) (V _{CB} =80Vdc, I _E =0)	MPSA55 MPSA56	0.1 0.1	µAdc

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

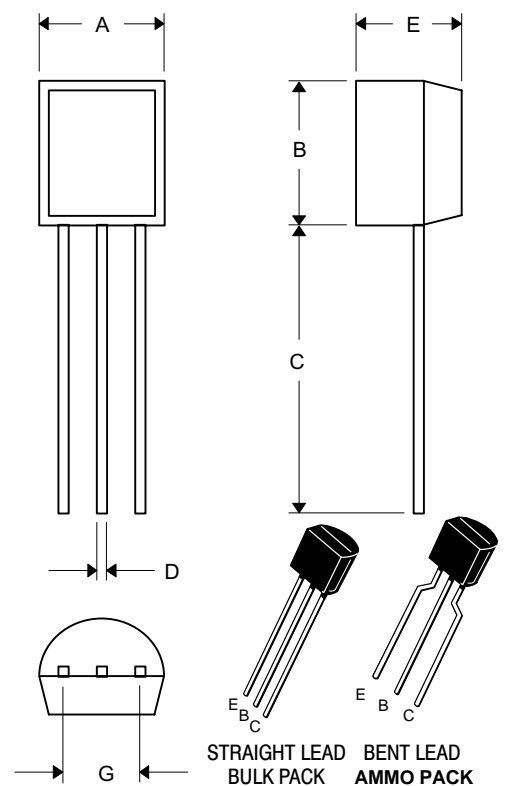
SMALL-SIGNAL CHARACTERISTICS

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



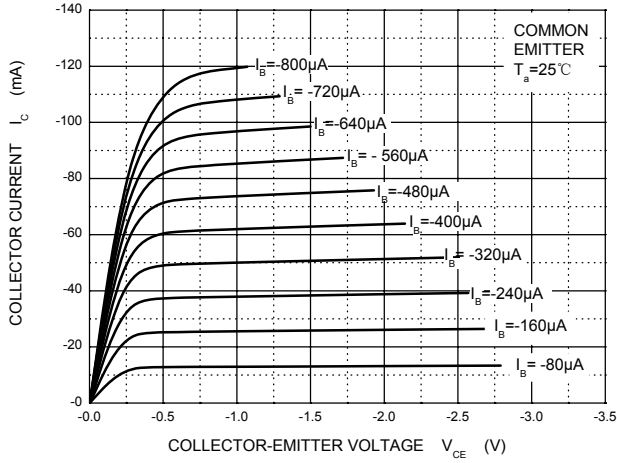
DIMENSIONS

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

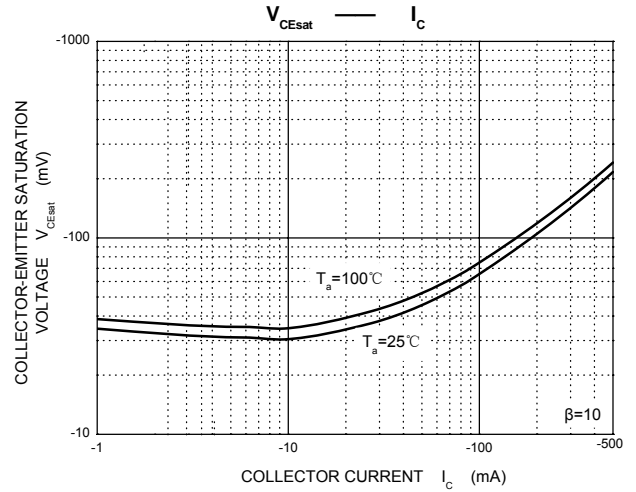
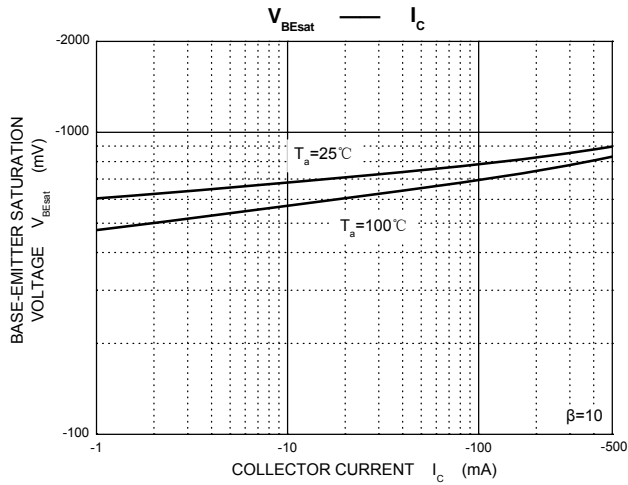
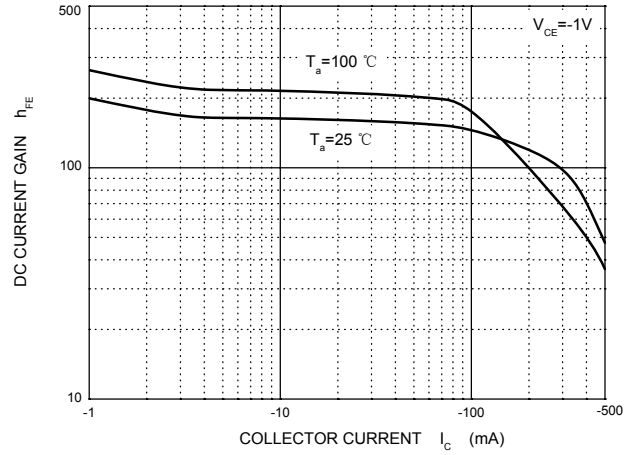
* For ammo packing detailed specification, click here to visit our website of product packaging for details.

Typical Characteristics

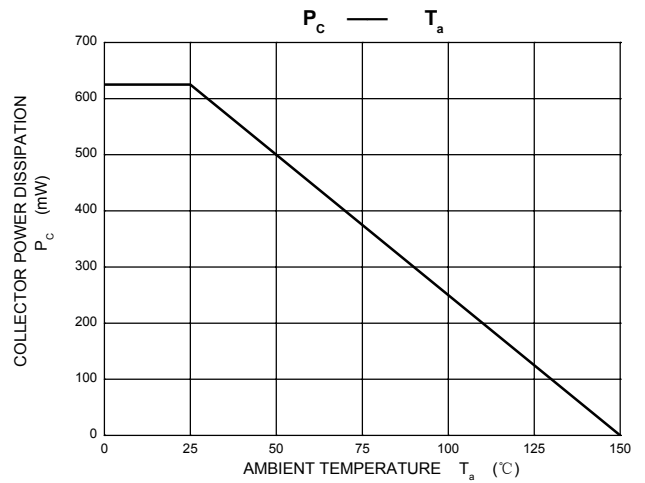
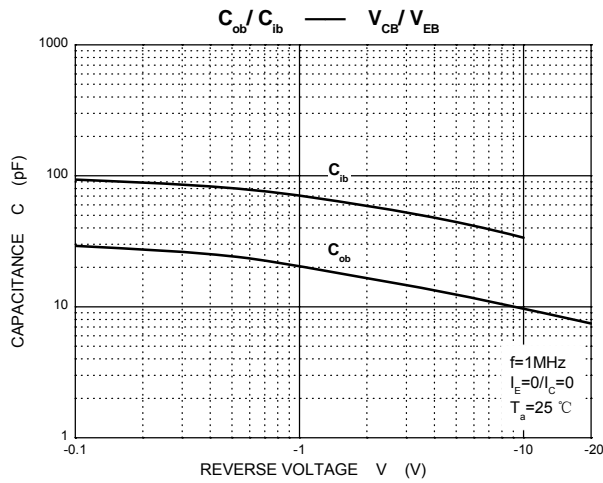
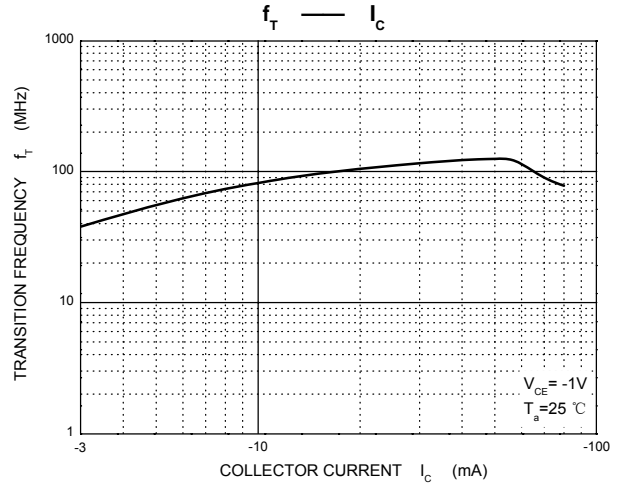
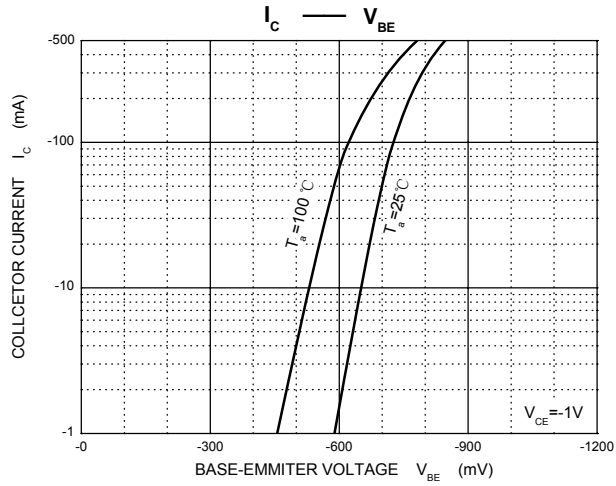
Static Characteristic



h_{FE} — I_c



Typical Characteristics





Micro Commercial Components

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-AP-HF

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