

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)
- Epoxy meets UL 94 V-0 flammability rating
- Moisure 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
l _c	Collector Current Continuous	500	mA
P₀	Total Device Dissipation @T _A =25 ^o C	625	mW
	Derate above 25°C	5.0	mW/°C
P_{D}	Total Device Dissipation @T _A =25°C	1.5	W
	Derate above 25°C	12	mW/ ^o C
TJ	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 Unit

OFF CHARACTERISTICS					
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ⁽¹⁾				
, ,	(b=1.0mAdc, l _B =0)	MPSA55	60		Vdc
		MPSA56	80		
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage		4.0		Vdc
, ,	(<u></u> =100uAdc, l _C =0)				
I _{CES}	Collector Cutoff Current			0.1	uAdc
	(V _{CE} =60Vdc, I _B =0)				
Сво	Collector Cutoff Current				
	(V _{CB} =60Vdc, <u></u> =0)	MPSA55		0.1	uAdc
	(V _{CB} =80Vdc, k =0)	MPSA56		0.1	

ON CHARACTERISTICS (1)

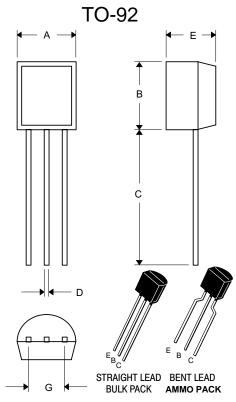
VII VIII III VII II VII VII VII VII VII				
h _{FE(1)}	DC Current Gain			
. ,	(b=10mAdc, Vce=1.0Vdc)	100		
h _{FE(2)}	DC Current Gain			
. ,	(b=100mAdc, V _{CE} =1.0Vdc)	100		
V _{CE(sat)}	Collector-Emitter Saturation Voltage			
. ,	(l _c =100mAdc, l _β =10mAdc)		0.25	Vdc
$V_{BE(on)}$	Base-Emitter Saturation Voltage			
()	(k=100mAdc, V _{CE} =1.0Vdc)		1.2	Vdc

SMALL-SIGNAL CHARACTERISTICS

f _T	Current-Gain – Bandwidth Product ⁽³⁾ (_b =100mAdc, V _{ce} =1.0Vdc,			
	f=100MHz)	MPSA55 MPSA56	50	MHz

- 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



DIMENSIONS					
	INCHES MM		1M		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.175	.185	4.45	4.70	
В	.175	.185	4.45	4.70	
С	.500		12.70		
D	.016	.020	0.41	0.63	
Е	.135	.145	3.43	3.68	
G	.095	.105	2.42	2.67	Straight Lead
G	.173	.220	4.40	5.60	Bent Lead

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



Ordering Information:

Device	Packing
Part Number-AP	Ammo Packing: 20Kpcs/Carton
Part Number-BP	Bulk: 100Kpcs/Carton

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