

**Micro Commercial Components** 



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## MPSA93

**Epitaxial Planar PNP** 

Transistor

# Features

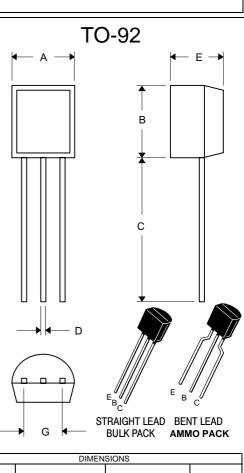
- Halogen free available upon request by adding suffix "-HF"
- Through Hole Package
- 150°C Junction Temperature
- Complementary to MPSA42/43
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisure Sensitivity Level 1
- Marking:A93

### **Maximum Ratings**

Symbol	Rating	Rating	Unit
V <sub>CEO</sub>	Collector-Emitter Voltage	-200	V
V <sub>CBO</sub>	Collector-Base Voltage	-200	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5.0	V
I <sub>C</sub>	Collector Current	-500	mA
Ι <sub>Ε</sub>	Emitter Current	500	mA
Pc	Collector Power Dissipation	625	mW
TJ	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	-55 to +150	°C
Electrical Abergeteristics @ 2510 Uplace Atherwise Specified			

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units	
OFF CHARACTERISTICS					
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage* (I <sub>C</sub> =1.0mAdc, I <sub>B</sub> =0)	-200		Vdc	
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage (I <sub>E</sub> =100µAdc, I <sub>C</sub> =0)	-200		Vdc	
I <sub>CBO</sub>	Collector Cutoff Current (V <sub>CB</sub> =-150Vdc, I <sub>E</sub> =0)		-0.25	µAdc	
I <sub>EBO</sub>	Emitter Cutoff Current (V <sub>EB</sub> =-3.0Vdc, I <sub>C</sub> =0)		-0.1	µAdc	
OFF CHARA	CTERISTICS				
*h <sub>FE</sub>	DC Current Gain (V <sub>CE</sub> =-10Vdc, I <sub>c</sub> =-1.0mAdc) (V <sub>CE</sub> =-10Vdc, I <sub>c</sub> =-10mAdc) (V <sub>CE</sub> =-10Vdc, I <sub>c</sub> =-30mAdc)	25 40 25			
*V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage (I <sub>c</sub> =-20mAdc, I <sub>B</sub> =-2.0mAdc)		-0.5	Vdc	
*V <sub>BE(on)</sub>	Base-Emitter On Voltage  -0.9 Velocity   (I <sub>c</sub> =-20mAdc, I <sub>B</sub> =-2.0mAdc)  -0.9 Velocity				
Small Sig	nal Characteristics				
f⊤	Current Gain Bandwidth Product (I <sub>c</sub> =-10mAdc, V <sub>ce</sub> =-20Vdc, f=100MHz)	50		MHz	
C <sub>ob</sub>	Collector Output Capacitance (I <sub>E</sub> =0mAdc, V <sub>CB</sub> =-20Vdc, f=1MHz)		8.0	pF	
* Pulse T	est: Pulse Width≦300µs, Duty Cycle	e≦2.0%			



	INCHES		ММ		
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.					

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### **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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