



Micro Commercial Components



Micro Commercial Components  
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## MPSA93

### Features

- 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
- Moisture Sensitivity Level 1
- Marking:A93

### Maximum Ratings

Symbol	Rating	Rating	Unit
$V_{CEO}$	Collector-Emitter Voltage	-200	V
$V_{CBO}$	Collector-Base Voltage	-200	V
$V_{EBO}$	Emitter-Base Voltage	-5.0	V
$I_C$	Collector Current	-500	mA
$I_E$	Emitter Current	500	mA
$P_C$	Collector Power Dissipation	625	mW
$T_J$	Junction Temperature	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* ( $I_C=1.0mA$ , $I_B=0$ )	-200	---	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ( $I_E=100\mu A$ , $I_C=0$ )	-200	---	Vdc
$I_{CBO}$	Collector Cutoff Current ( $V_{CB}=-150Vdc$ , $I_E=0$ )	---	-0.25	$\mu A$ dc
$I_{EBO}$	Emitter Cutoff Current ( $V_{EB}=-3.0Vdc$ , $I_C=0$ )	---	-0.1	$\mu A$ dc

#### OFF CHARACTERISTICS

$h_{FE}$	DC Current Gain ( $V_{CE}=-10Vdc$ , $I_C=-1.0mA$ ) ( $V_{CE}=-10Vdc$ , $I_C=-10mA$ ) ( $V_{CE}=-10Vdc$ , $I_C=-30mA$ )	25 40 25	---	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C=-20mA$ , $I_B=-2.0mA$ )	---	-0.5	Vdc
$V_{BE(on)}$	Base-Emitter On Voltage ( $I_C=-20mA$ , $I_B=-2.0mA$ )	---	-0.9	Vdc

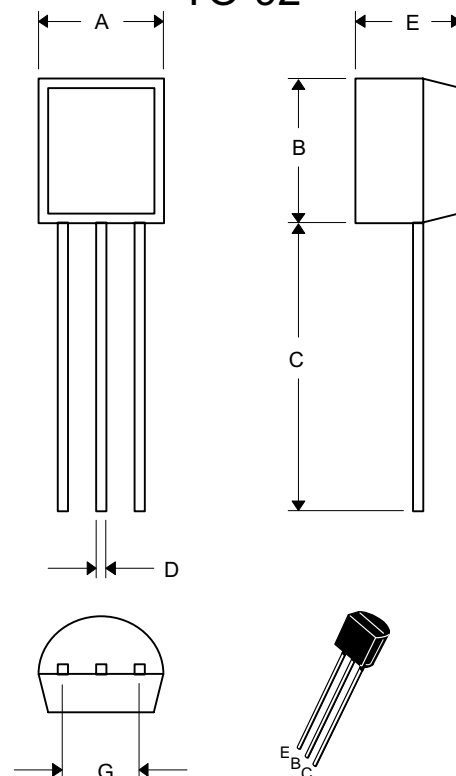
### Small Signal Characteristics

$f_T$	Current Gain Bandwidth Product ( $I_C=-10mA$ , $V_{CE}=-20Vdc$ , $f=100MHz$ )	50	---	MHz
$C_{ob}$	Collector Output Capacitance ( $I_E=0mA$ , $V_{CB}=-20Vdc$ , $f=1MHz$ )		8.0	pF

\* Pulse Test: Pulse Width  $\leq 300\mu s$ , Duty Cycle  $\leq 2.0\%$

## Epitaxial Planar PNP Transistor

### TO-92



#### DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
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	

## Ordering Information :

Device	Packing
Part Number-AP	Ammo Packing: 2Kpcs/Ammo Box
Part Number-BP	Bulk: 100Kpcs/Carton

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