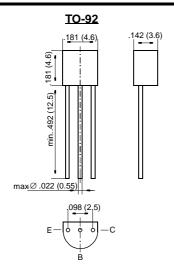
MPSA92, MPSA93

Small Signal Transistors (PNP)



Dimensions in inches and (millimeters)

FEATURES

PNP Silicon Epitaxial Planar Transistors especially suited as line switch in telephone subsets and in video output stages of TV receivers and monitors.



 As complementary types, the PNP transistors MPSA42 and MPSA43 are recommended.

MECHANICAL DATA

Case: TO-92 Plastic Package Weight: approx. 0.18 g

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

Absolute Maximum Ratings

		Symbol	Value	Unit
Collector-Emitter Voltage	MPSA92 MPSA93	-V _{CEO}	300 200	V
Collector-Base Voltage	MPSA92 MPSA93	-V _{CBO}	300 V 200 V	
Emitter-Base Voltage		-V _{EBO}	5	V
Collector Current		-I _C	500	mA
Power Dissipation at T _{amb} = 25 °C		P _{tot}	625 ¹⁾	mW
Junction Temperature		Tj	150	°C
Storage Temperature Range		T _S	-65 to +150	°C

¹⁾ Valid provided that lead are kept at ambient temperature at a distance of 2 mm from case.



MPSA92, MPSA93

ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

		Symbol	Min.	Тур.	Max.	Unit
Collector-Emitter Breakdown Voltage -I _C = 10 mA, I _B = 0	MPSA92 MPSA93	-V _(BR) CEO -V _(BR) CEO	300 200	_ _		V
Collector-Base Breakdown Voltage $-I_C = 100 \mu A$, $I_E = 0$	MPSA92 MPSA93	-V _(BR) CBO -V _(BR) CBO	300 200			V
Emitter-Base Breakdown Voltage $-I_E = 100 \mu A$, $I_C = 0$		-V _{(BR)EBO}	5	-	_	V
Collector-Base Cutoff Current $-V_{CB} = 200 \text{ V}, I_E = 0$ $-V_{CB} = 160 \text{ V}, I_E = 0$	MPSA92 MPSA93	-I _{CBO}		_ _	250 250	nA nA
Emitter-Base Cutoff Current $-V_{EB} = 3 \text{ V, I}_{C} = 0$		-l _{EBO}	_	_	100	nA
DC Current Gain $-I_C = 1 \text{ mA}, -V_{CE} = 10 \text{ V}$ $-I_C = 10 \text{ mA}, -V_{CE} = 10 \text{ V}$ $-I_C = 30 \text{ mA}, -V_{CE} = 10 \text{ V}$		h _{FE} h _{FE}	25 40 25	- - -	- - -	_ _ _
Collector-Emitter Saturation Voltage $-I_{C} = 20 \text{ mA}, -I_{B} = 2 \text{ mA}$		-V _{CEsat}	_	_	500	mV
Base-Emitter Saturation Voltage $-I_C = 20 \text{ mA}, -I_B = 2 \text{ mA}$		-V _{BEsat}	-	-	900	mV
Gain-Bandwidth Product -I _C = 10 mA, -V _{CE} = 20 V, f = 100 MHz		f _T	50	-	-	MHz
Collector-Base Capacitance -V _{CB} = 20 V, I _E = 0, f = 1 MHz	MPSA92 MPSA93	C _{CBO}			6 8	pF pF
Thermal Resistance Junction to Ambient Air		R _{thJA}	_	_	2001)	K/W

¹⁾ Valid provided that lead are kept at ambient temperature at a distance of 2 mm from case.

