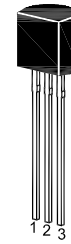


# MPSA55 / 56

## PNP Transistor

for amplifier applications

On special request, these transistors can be manufactured in different pin configurations.



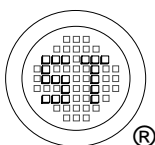
1. Emitter 2. Base 3. Collector  
TO-92 Plastic Package

### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Collector Base Voltage	MPSA55 MPSA56 $-V_{CBO}$	60 80	V
Collector Emitter Voltage	MPSA55 MPSA56 $-V_{CEO}$	60 80	V
Emitter Base Voltage	$-V_{EBO}$	4	V
Collector Current	$-I_C$	500	mA
Power Dissipation	$P_{tot}$	625	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150	$^\circ\text{C}$

### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain	$h_{FE}$	100	-	-
at $-V_{CE} = 1\text{ V}$ , $-I_C = 10\text{ mA}$	$h_{FE}$	100	-	-
at $-V_{CE} = 1\text{ V}$ , $-I_C = 100\text{ mA}$				
Collector Base Cutoff Current	$-I_{CBO}$	-	100	nA
at $-V_{CB} = 60\text{ V}$	MPSA55	-	100	nA
at $-V_{CB} = 80\text{ V}$	MPSA56	-	100	nA
Collector Emitter Cutoff Current	$-I_{CES}$	-	100	nA
at $-V_{CE} = 60\text{ V}$				
Collector Emitter Breakdown Voltage	$-V_{(BR)CEO}$	60	-	V
at $-I_C = 1\text{ mA}$	MPSA55	80	-	V
MPSA56				
Emitter Base Breakdown Voltage	$-V_{(BR)EBO}$	4	-	V
at $-I_E = 100\text{ }\mu\text{A}$				
Collector Emitter Saturation Voltage	$-V_{CE(sat)}$	-	0.25	V
at $-I_C = 100\text{ mA}$ , $-I_B = 10\text{ mA}$				
Base Emitter On Voltage	$-V_{BE(on)}$	-	1.2	V
at $-I_C = 100\text{ mA}$ , $-V_{CE} = 1\text{ V}$				
Transition Frequency	$f_T$	50	-	MHz
at $-V_{CE} = 2\text{ V}$ , $-I_C = 100\text{ mA}$ , $f = 100\text{ MHz}$				

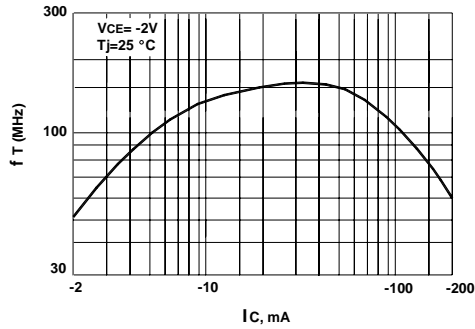


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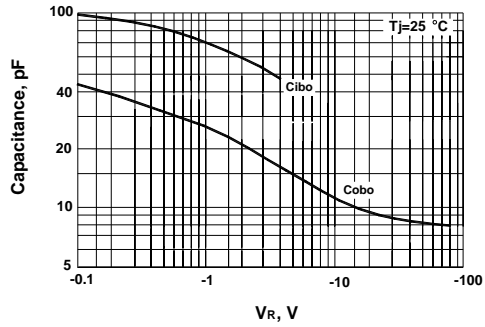


Dated : 26/02/2005

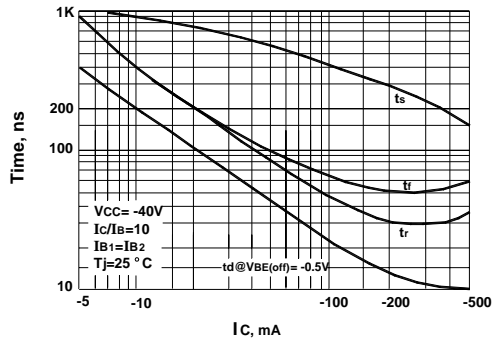
Current gain - bandwidth product



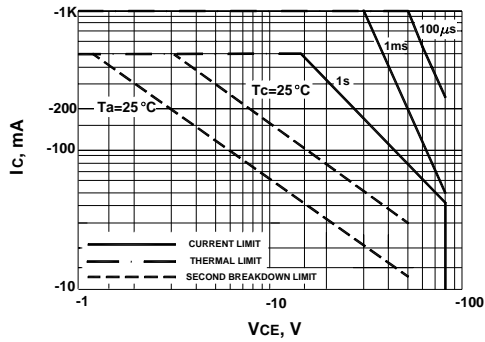
Capacitance



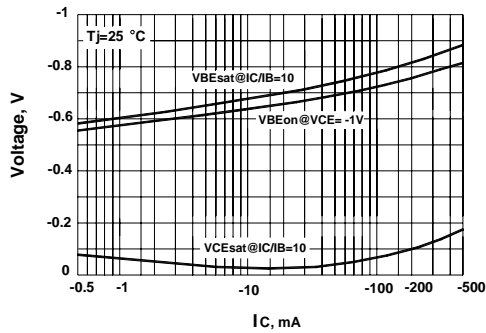
Switching Time



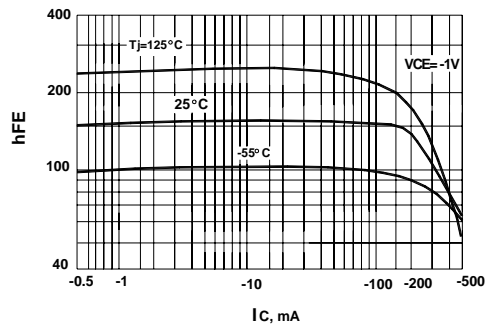
Active-region safe operating area



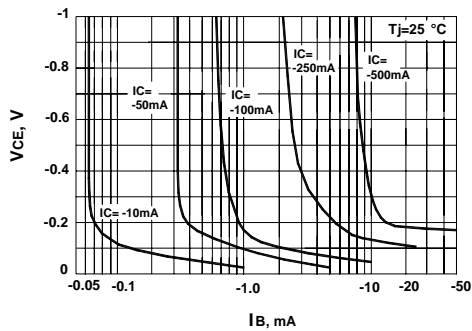
"ON" voltages



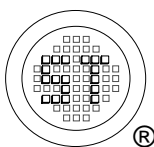
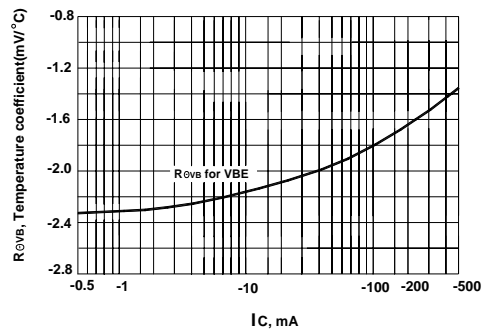
DC current gain



Collector saturation region



Base emitter temperature coefficient



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