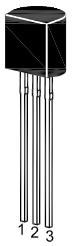
MPSA55 / 56

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

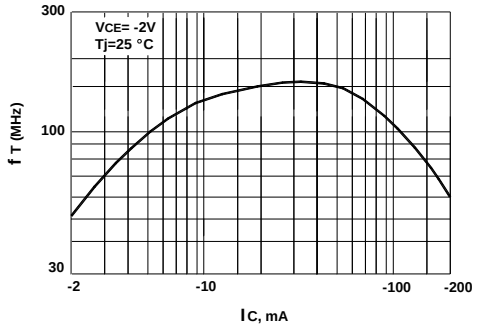
Absolute Maximum Ratings (T_a = 25 °C)

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	°C
Storage Temperature Range		T_{stg}	- 55 to + 150	°C

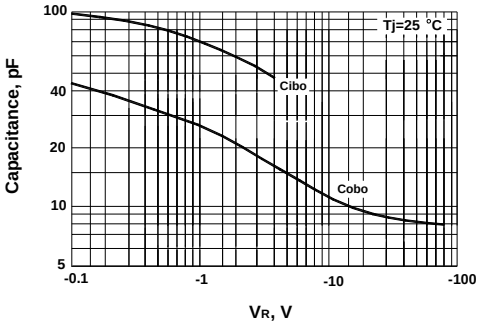
Characteristics at T_a = 25 °C

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

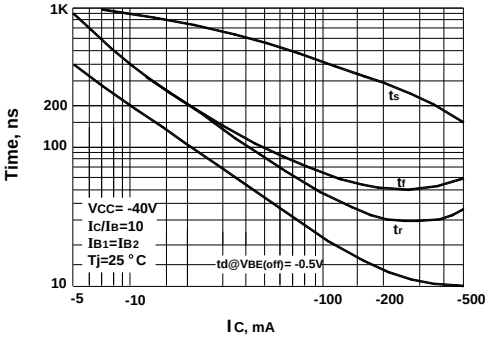
Current gain - bandwidth product



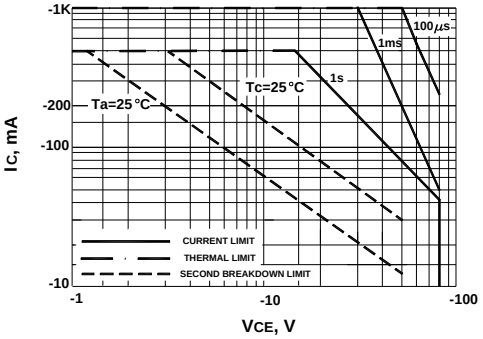
Capacitance



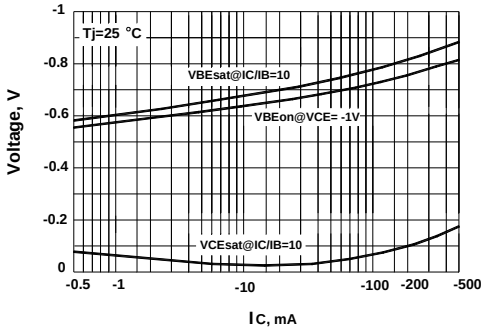
Switching Time



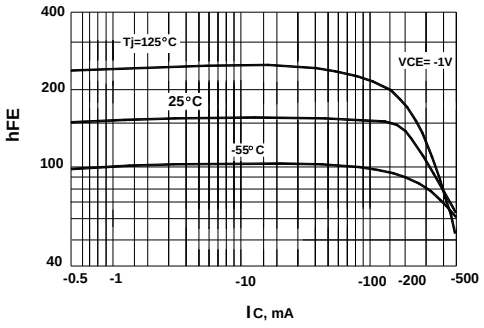
Active- region safe operating area



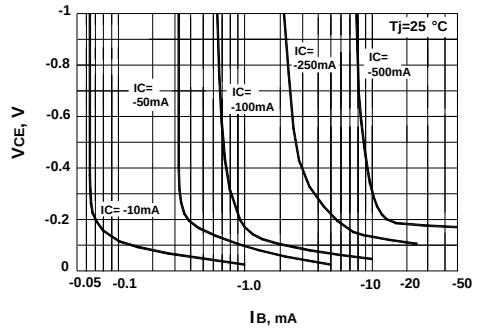
"ON" voltages



DC current gain



Collector saturation region



Base emitter temperature coefficient