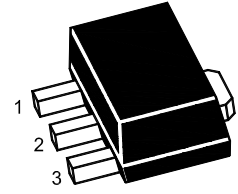


## Plastic-Encapsulate Transistors

TRANSISTOR (PNP)

### FEATURES

- Low Collector-Emitter Saturation Voltage
- High Breakdown Voltage



1.Base 2.Collector 3.Emitter  
SOT-89 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{\text{CBO}}$	300	V
Collector Emitter Voltage	$-V_{\text{CEO}}$	300	V
Emitter Base Voltage	$-V_{\text{EBO}}$	5	V
Collector Current	$-I_{\text{C}}$	500	mA
Power Dissipation	$P_{\text{tot}}$	500	mW
Junction Temperature	$T_{\text{j}}$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{\text{stg}}$	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain				
at $-I_{\text{C}} = 1 \text{ mA}$ , $-V_{\text{CE}} = 10 \text{ V}$	$h_{\text{FE}}$	25	-	-
at $-I_{\text{C}} = 10 \text{ mA}$ , $-V_{\text{CE}} = 10 \text{ V}$	$h_{\text{FE}}$	40	-	-
at $-I_{\text{C}} = 30 \text{ mA}$ , $-V_{\text{CE}} = 10 \text{ V}$	$h_{\text{FE}}$	25	-	-
Collector Base Cutoff Current				
at $-V_{\text{CB}} = 200 \text{ V}$	$-I_{\text{CB0}}$	-	0.25	$\mu\text{A}$
Emitter Base Cutoff Current				
at $-V_{\text{EB}} = 3 \text{ V}$	$-I_{\text{EBO}}$	-	0.1	$\mu\text{A}$
Collector Base Breakdown Voltage				
at $-I_{\text{C}} = 100 \mu\text{A}$	$-V_{(\text{BR})\text{CBO}}$	300	-	V
Collector Emitter Breakdown Voltage				
at $-I_{\text{C}} = 1 \text{ mA}$	$-V_{(\text{BR})\text{CEO}}$	300	-	V
Emitter Base Breakdown Voltage				
at $-I_{\text{E}} = 100 \mu\text{A}$	$-V_{(\text{BR})\text{EBO}}$	5	-	V
Collector Emitter Saturation Voltage				
at $-I_{\text{C}} = 20 \text{ mA}$ , $-I_{\text{B}} = 2 \text{ mA}$	$-V_{\text{CE}(\text{sat})}$	-	0.5	V
Base Emitter Saturation Voltage				
at $-I_{\text{C}} = 20 \text{ mA}$ , $-I_{\text{B}} = 2 \text{ mA}$	$-V_{\text{BE}(\text{sat})}$	-	0.9	V
Gain Bandwidth Product				
at $-I_{\text{C}} = 10 \text{ mA}$ , $-V_{\text{CE}} = 20 \text{ V}$ , $f = 100 \text{ MHz}$	$f_{\text{T}}$	50	-	MHz
Collector Output Capacitance				
at $-V_{\text{CB}} = 20 \text{ V}$ , $f = 1 \text{ MHz}$	$C_{\text{ob}}$	-	6	pF

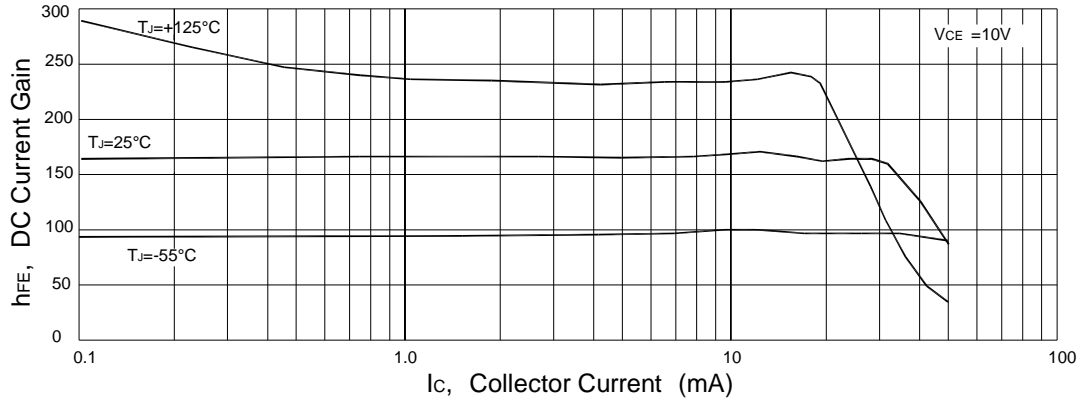


Figure 1. DC Current Gain

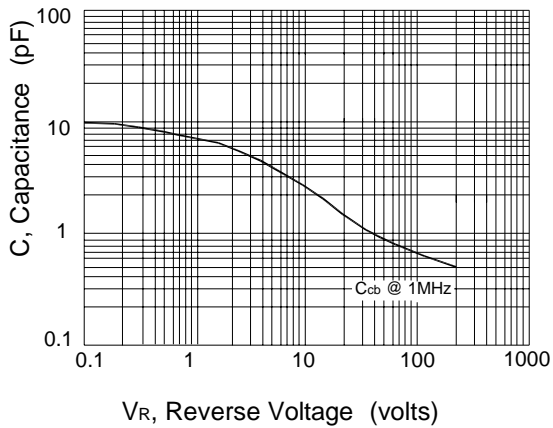


Figure 2. Capacitance

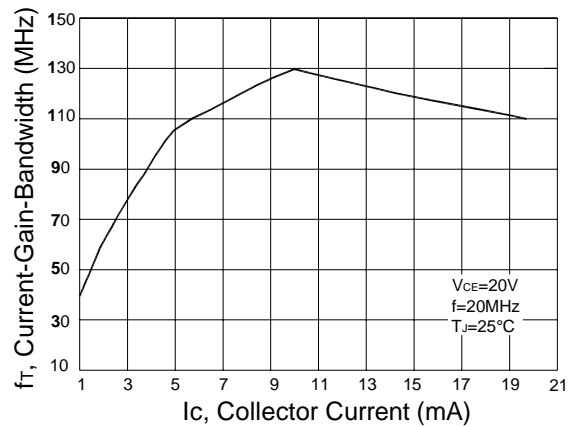
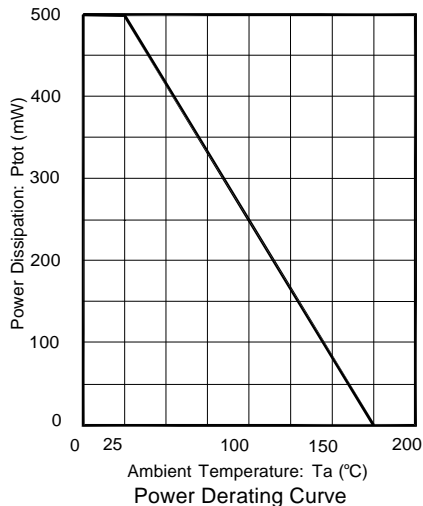


Figure 3. Current-Gain-Bandwidth



Power Derating Curve