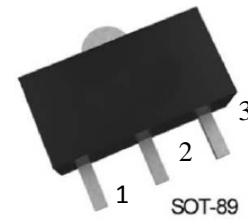


NPN Silicon Epitaxial Planar Transistor

For switching and amplifier applications.
Especially suitable for AF-driver stages
and low power output stages.



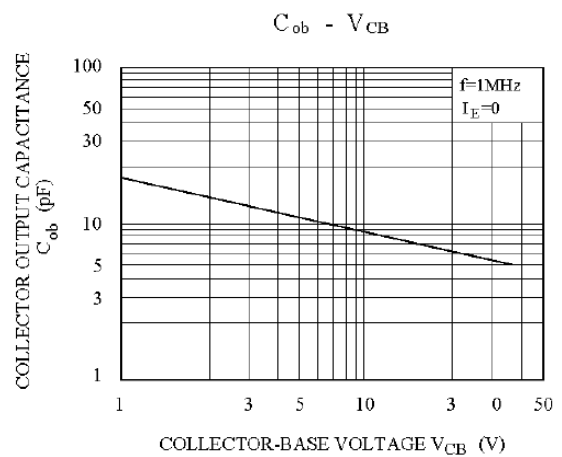
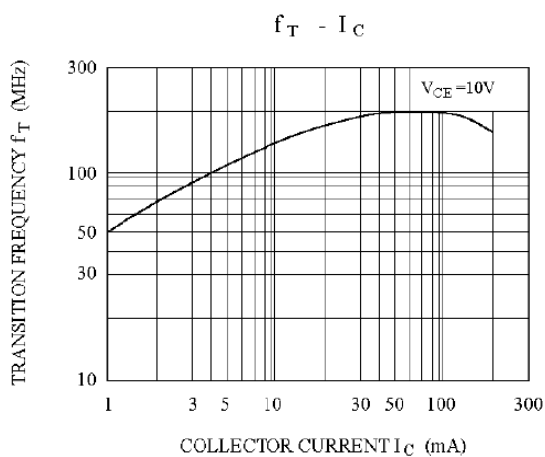
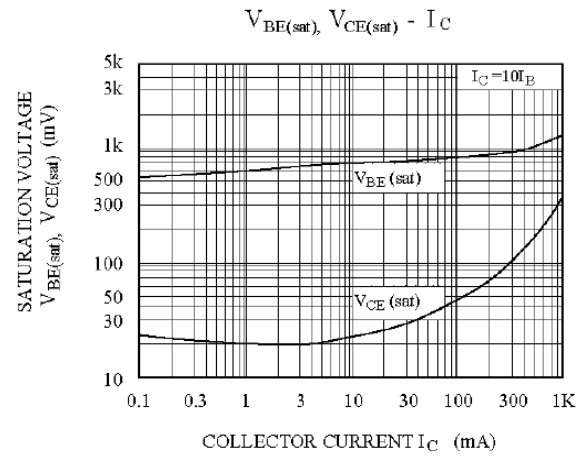
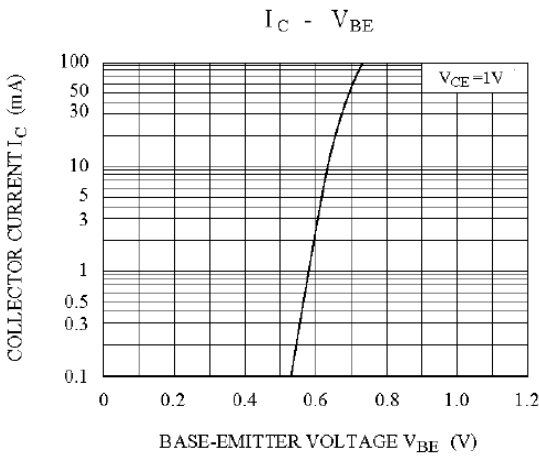
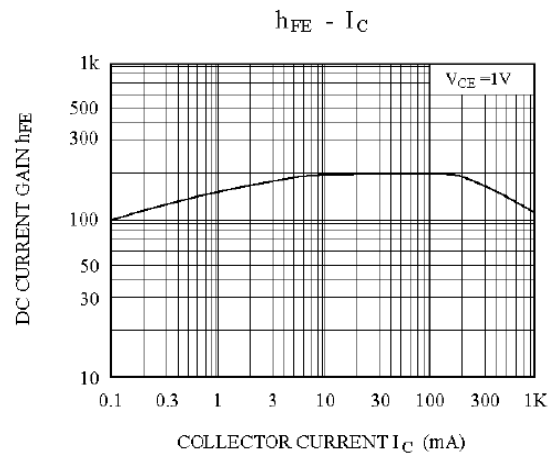
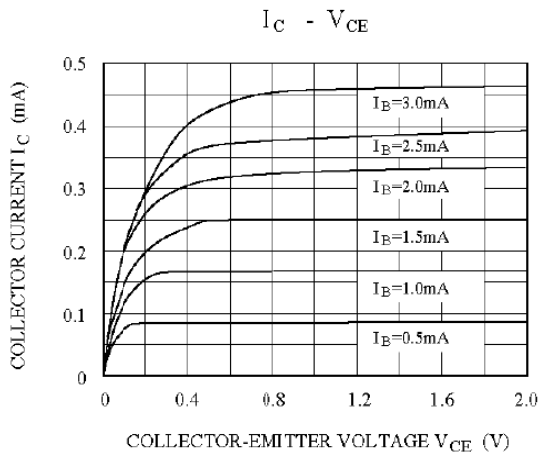
1.Base 2.Collector 3.Emitter
SOT-89 Plastic Package

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

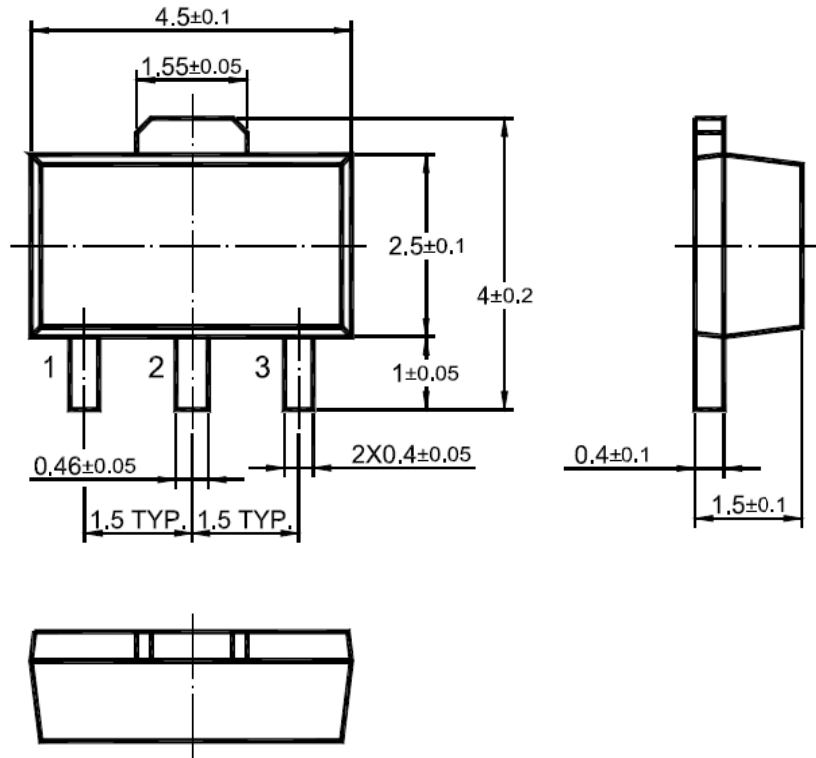
Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	40	V
Collector Emitter Voltage	V_{CEO}	25	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1.5	A
Power Dissipation	P_{tot}	625	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{Stg}	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain					
at $V_{CE} = 1\text{ V}$, $I_C = 100\text{ mA}$	h_{FE}	250	-	350	-
at $V_{CE} = 1\text{ V}$, $I_C = 800\text{ mA}$					
Collector Base Cutoff Current at $V_{CB} = 35\text{ V}$	I_{CBO}	-	-	100	nA
Emitter Base Cutoff Current at $V_{EB} = 5\text{ V}$	I_{EBO}	-	-	100	nA
Collector Base Breakdown Voltage at $I_C = 100\text{ }\mu\text{A}$	$V_{(BR)CBO}$	40	-	-	V
Collector Emitter Breakdown Voltage at $I_C = 2\text{ mA}$	$V_{(BR)CEO}$	25	-	-	V
Emitter Base Breakdown Voltage at $I_E = 100\text{ }\mu\text{A}$	$V_{(BR)EBO}$	5	-	-	V
Collector Emitter Saturation Voltage at $I_C = 800\text{ mA}$, $I_B = 80\text{ mA}$	$V_{CE(sat)}$	-	-	0.5	V
Base Emitter Saturation Voltage at $I_C = 800\text{ mA}$, $I_B = 80\text{ mA}$	$V_{BE(sat)}$	-	-	1.2	V
Base Emitter Voltage at $I_C = 10\text{ mA}$, $V_{CE} = 1\text{ V}$	V_{BE}	-	-	1	V
Gain Bandwidth Product at $V_{CE} = 10\text{ V}$, $I_C = 50\text{ mA}$	f_T	100	-	-	MHz



SOT-89 PACKAGE OUTLINE



Dimensions in mm