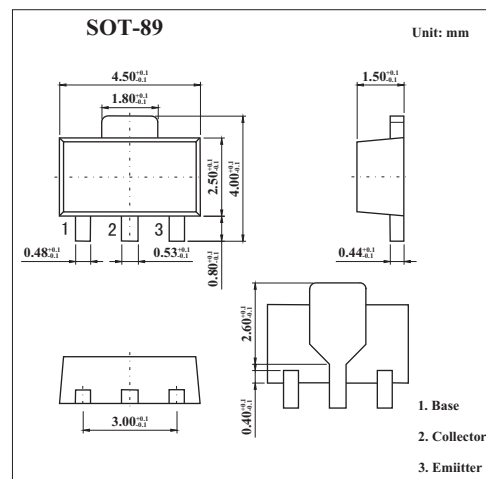


NPN Power Transistor

C2611

■ Features

- Collector-emitter Voltage: $V_{(BR)CEO}=400V$
- Collector Current: $I_C=0.2A$



■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	600	V
Collector-Emitter Voltage	V_{CEO}	400	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current -Continuous	I_C	0.2	A
Collector Dissipation	P_C	0.5	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to 150	$^\circ C$

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100\mu A, I_E = 0$	600			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1mA, I_B = 0$	400			V
Emitter-base Breakdown voltage	$V_{(BR)EBO}$	$I_E = 100\mu A, I_C = 0$	7			V
Collector-base cut-off current	I_{CBO}	$V_{CB} = 600V, I_E = 0$			100	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=7V, I_C=0$			100	μA
DC current gain	h_{FE}	$V_{CE} = 20V, I_C = 20mA$	10		40	
		$V_{CE} = 10V, I_C = 0.25mA$	5			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 50mA, I_B = 10mA$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 50mA, I_B = 10mA$			1.2	V
Fall time	t_f	$I_{B1}=-I_{B2}=5mA, I_C=50mA, V_{CC}=45V$			0.3	μs
Storage time	t_s	$I_{B1}=-I_{B2}=5mA, I_C=50mA, V_{CC}=45V$			1.5	μs
Transition frequency	f_T	$V_{CE} = 20V, I_C = 20mA, f = 1MHz$	8			MHz

■ h_{FE} Classification

Rank						
h_{FE}	10~15	15~20	20~25	25~30	30~35	35~40

C2611

■ Typical Characteristics

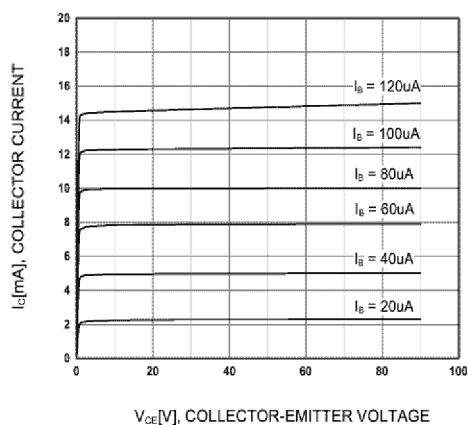


Figure 1. Static Characteristic

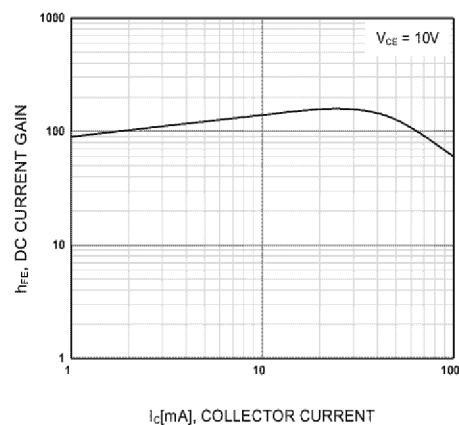


Figure 2. DC current Gain

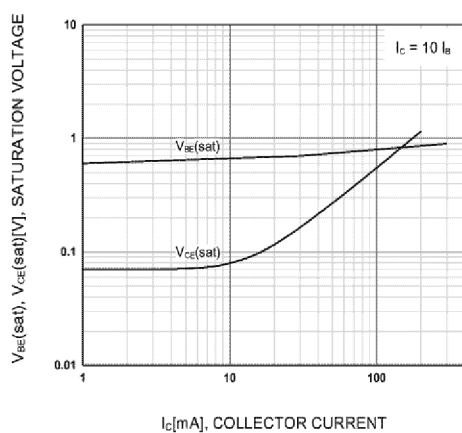
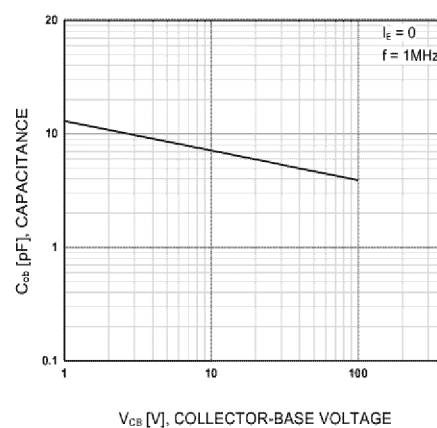
Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

Figure 4. Collector Output Capacitance