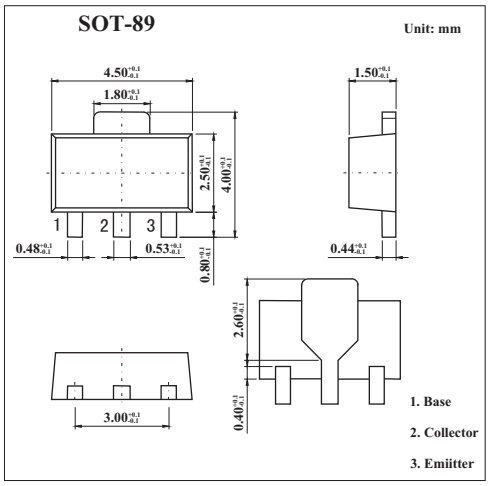
TY Semicondutor®

Product specification

C2611



■ Features

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

■ Absolute Maximum Ratings Ta = 25℃

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	℃
Storage Temperature	T_{stg}	-55 to 150	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C = 100μA , 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 = 100μA , 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= 10 mA			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C= 50mA, I_B= 10 mA			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} = 20 V , I_C = 20 mA , f = 1 MHz	8			MHz

■ h_{FE} Classification

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

■ Typical Characteristics

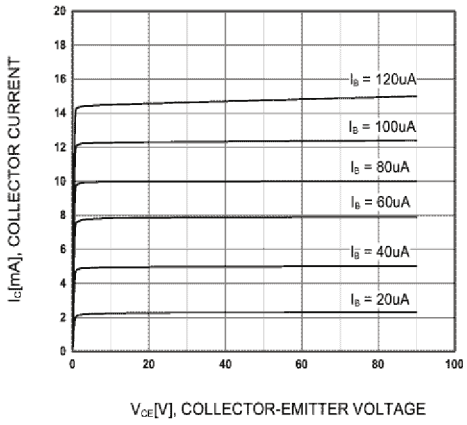


Figure 1. Static Characteristic

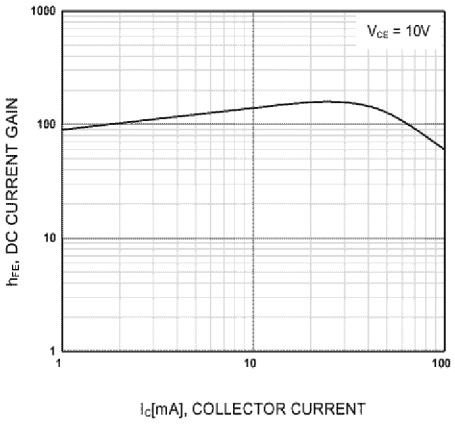


Figure 2. DC current Gain

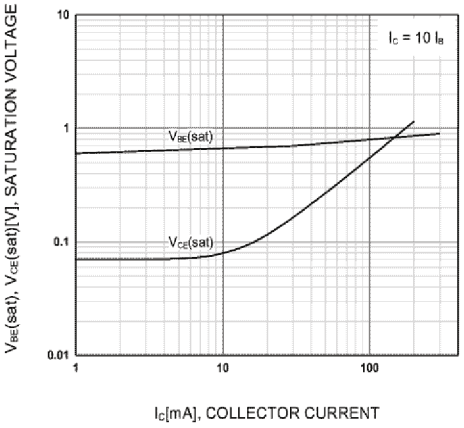


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

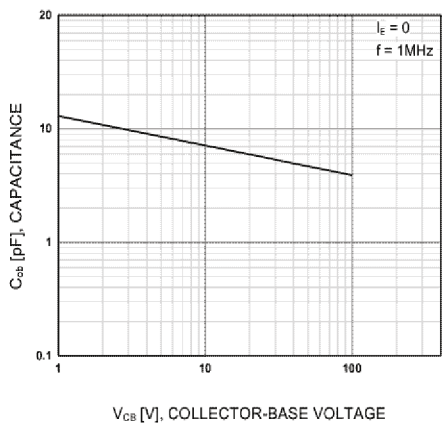


Figure 4. Collector Output Capacitance