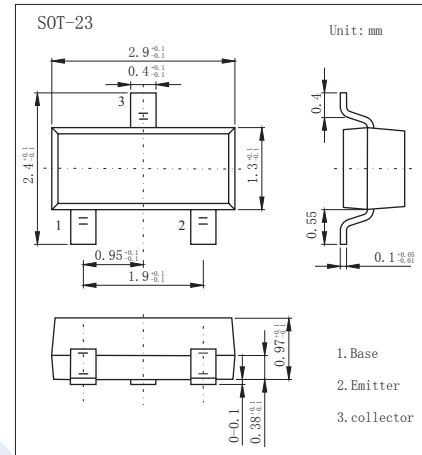


NPN Transistors

2SC3689

■ Features

- Collector Current Capability $I_C=100\text{mA}$
- Collector Emitter Voltage $V_{CE0}=50\text{V}$

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	60	V
Collector - Emitter Voltage	V_{CE0}	50	
Emitter - Base Voltage	V_{EB0}	15	
Collector Current - Continuous	I_C	100	mA
Collector Current - Pulse	I_{CP}	200	
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to 125	

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CB0}	$I_C = 100 \mu\text{A}$, $I_E = 0$	60			V
Collector-emitter breakdown voltage	V_{CE0}	$I_C = 1 \text{mA}$, $I_B = 0$	50			
Emitter - base breakdown voltage	V_{EB0}	$I_E = 100 \mu\text{A}$, $I_C = 0$	15			
Collector-base cut-off current	I_{CBO}	$V_{CB} = 40\text{V}$, $I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 10\text{V}$, $I_C = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 50 \text{mA}$, $I_B = 1\text{mA}$			0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 50 \text{mA}$, $I_B = 1\text{mA}$			1.1	
DC current gain	h_{FE}	$V_{CE} = 5\text{V}$, $I_C = 10\text{mA}$	800		3200	
Collector output capacitance	C_{ob}	$V_{CB} = 10\text{V}$, $f = 1\text{MHz}$		1.5		pF
Transition frequency	f_T	$V_{CE} = 10\text{V}$, $I_C = 10\text{mA}$		200		MHz

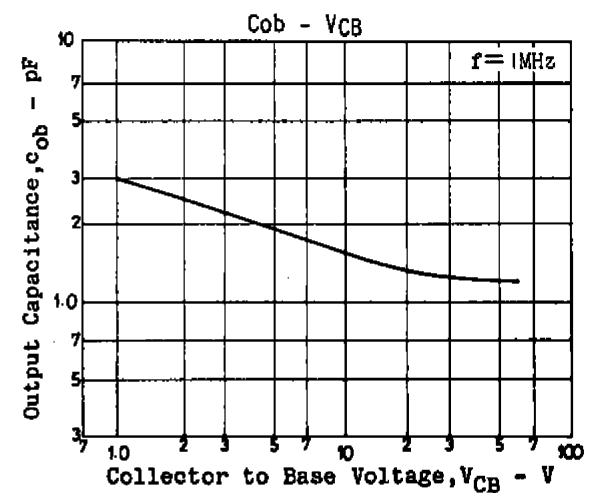
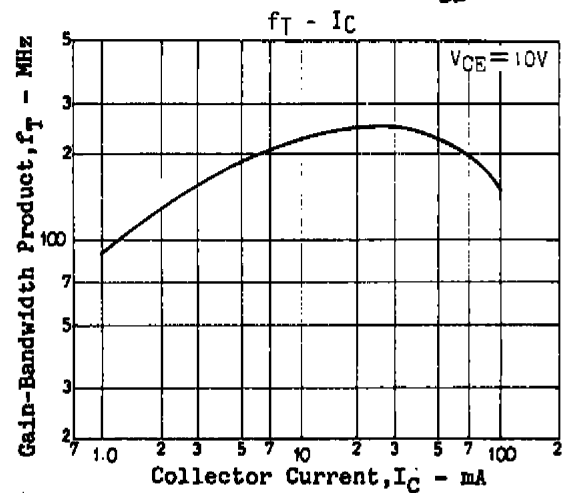
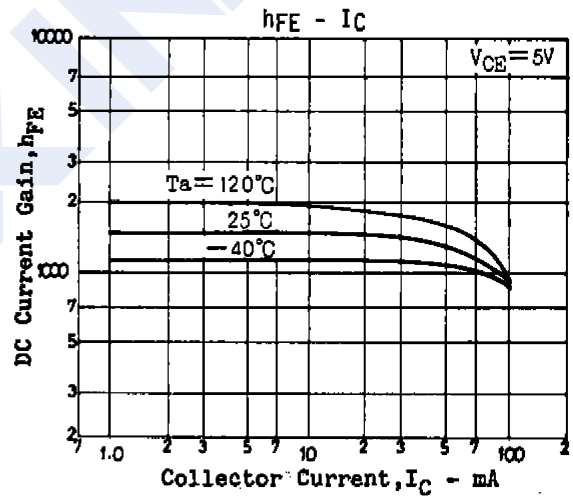
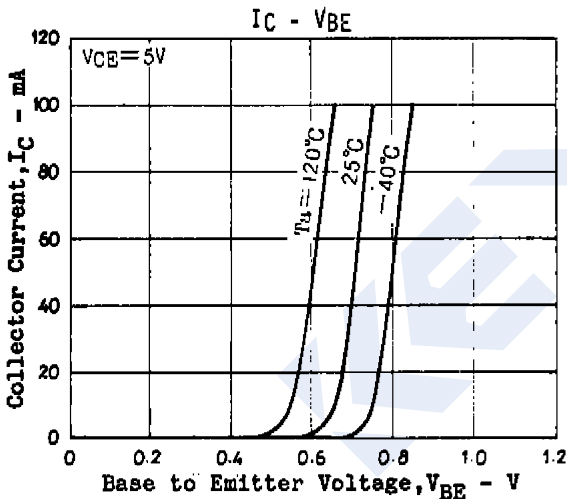
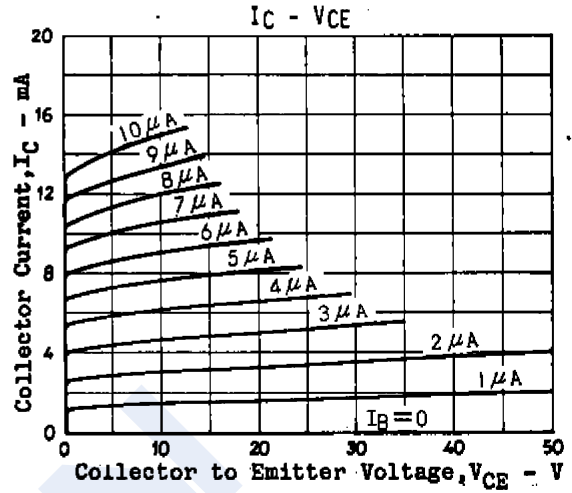
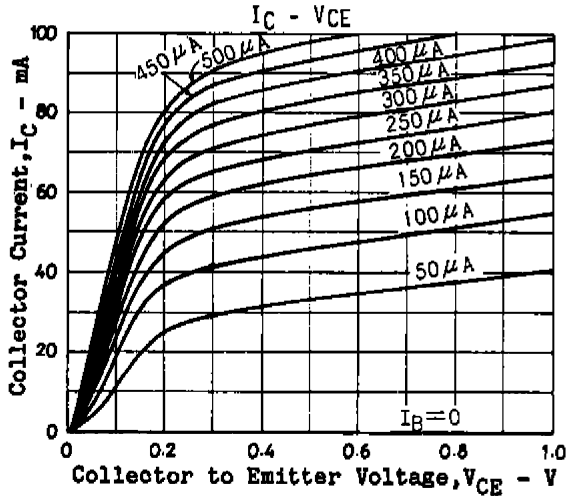
■ Marking

Marking	GY
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NPN Transistors

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■ Typical Characteristics



NPN Transistors

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■ Typical Characteristics

