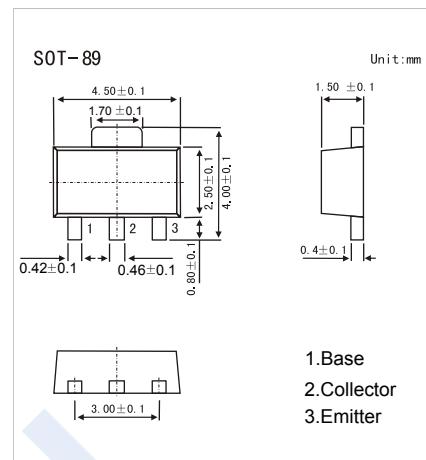


**NPN Transistors****2SC3736****■ Features**

- High Speed,High Voltage Switching
- Low Collector Saturation Voltage
- Complementary to 2SA1463

**■ Absolute Maximum Ratings Ta = 25°C**

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V <sub>CBO</sub>	80	V
Collector - Emitter Voltage	V <sub>C EO</sub>	45	
Emitter - Base Voltage	V <sub>EBO</sub>	5	
Collector Current - Continuous	I <sub>C</sub>	1	A
Collector Current - Pulse *1	I <sub>CP</sub>	2	
Collector Power Dissipation	P <sub>C</sub>	2	W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55 to 150	

\*1 : Pulse :PW ≤ 10ms,Duty Cycle ≤ 50%

**■ Electrical Characteristics Ta = 25°C**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>CBO</sub>	I <sub>C</sub> = 100 μA, I <sub>E</sub> = 0	80			V
Collector-emitter breakdown voltage	V <sub>C EO</sub>	I <sub>C</sub> = 1 mA, I <sub>B</sub> = 0	45			
Emitter-base breakdown voltage	V <sub>EBO</sub>	I <sub>E</sub> = 100 μA, I <sub>C</sub> = 0	5			
Collector-base cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> = 80V, I <sub>E</sub> = 0			0.5	uA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = 4V, I <sub>C</sub> = 0			0.5	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =500 mA, I <sub>B</sub> =50mA		0.17	0.4	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =500 mA, I <sub>B</sub> =50mA		0.9	1.2	
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = 10V, I <sub>C</sub> = 50mA	60		200	
Turn-on time	t <sub>on</sub>	I <sub>C</sub> =500mA, I <sub>B1</sub> =I <sub>B2</sub> =50mA		20	40	ns
Storage time	t <sub>stg</sub>			55	80	
Turn-off time	t <sub>off</sub>			72	100	
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 5V, I <sub>E</sub> = 0, f=1MHz		6.7	10	pF
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = 10V, I <sub>E</sub> = -100mA	300	380		MHz

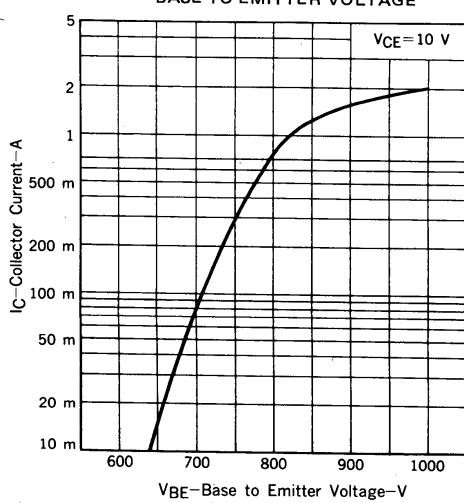
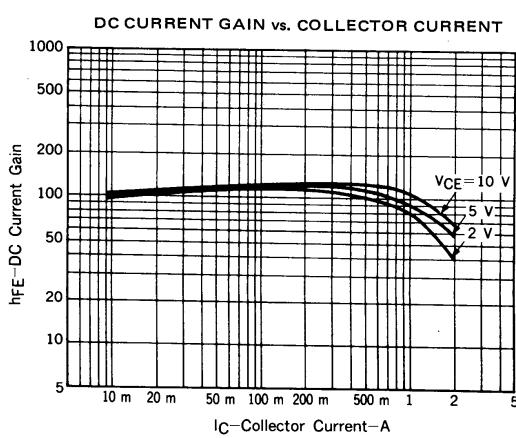
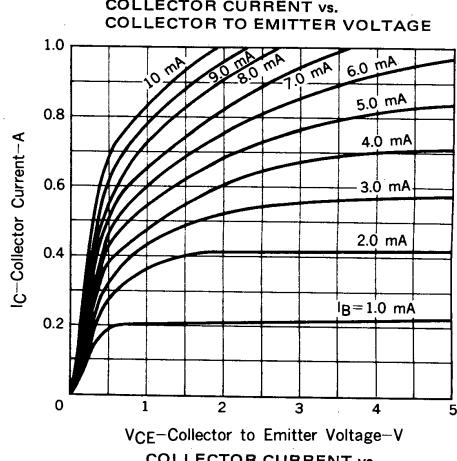
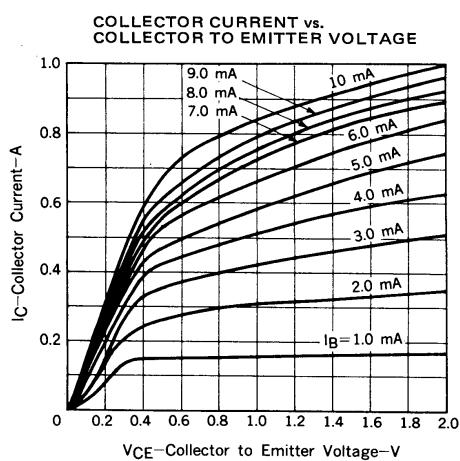
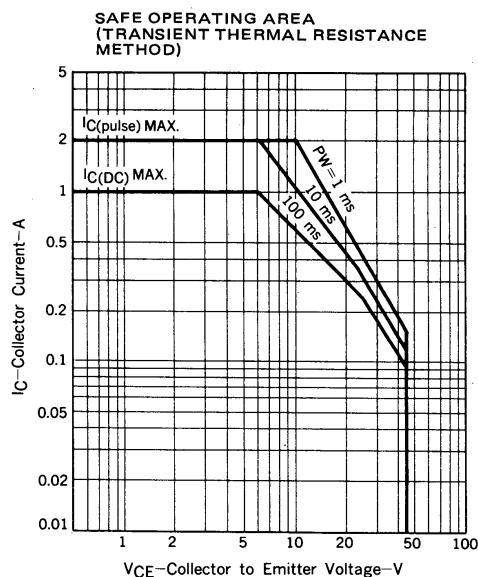
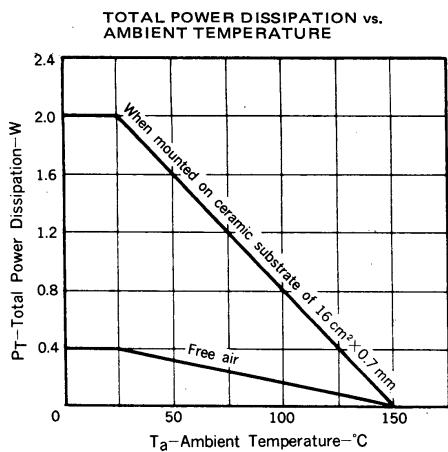
**■ Classification of h<sub>FE</sub>**

Type	2SC3736-L	2SC3736-K
Range	60-120	100-200
Marking	OL	OK

## NPN Transistors

## 2SC3736

## ■ Typical Characteristics



## NPN Transistors

**2SC3736**

## ■ Typical Characteristics

