



# TIGER ELECTRONIC CO.,LTD

## TO-92L Plastic-Encapsulate Transistors

**2SC2236** TRANSISTOR (NPN)

### FEATURE

- Complementary to 2SA966 and 3 Watts Output Applications.

### MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)

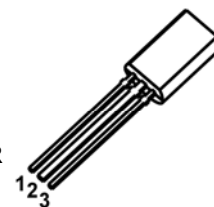
Symbol	Parameter	Value	Unit
V <sub>CBO</sub>	Collector-Base Voltage	30	V
V <sub>CEO</sub>	Collector-Emitter Voltage	30	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
I <sub>C</sub>	Collector Current -Continuous	1.5	A
P <sub>C</sub>	Collector Power Dissipation	0.9	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55~+150	°C

### TO-92L

1. EMITTER

2. COLLECTOR

3. BASE



### ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V(BR) <sub>CBO</sub>	I <sub>C</sub> = 1mA , I <sub>E</sub> =0	30			V
Collector-emitter breakdown voltage	V(BR) <sub>CEO</sub>	I <sub>C</sub> = 10mA , I <sub>B</sub> =0	30			V
Emitter-base breakdown voltage	V(BR) <sub>EBO</sub>	I <sub>E</sub> = 1mA , I <sub>C</sub> =0	5			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =30V , I <sub>E</sub> =0			0.1	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =5V , I <sub>C</sub> =0			0.1	μA
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> =2 V , I <sub>C</sub> = 500mA	100		320	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = 1.5 A , I <sub>B</sub> = 0.03A			2	V
Base-emitter voltage	V <sub>BE</sub>	I <sub>C</sub> = 500 mA , V <sub>CE</sub> = 2V			1	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = 2V , I <sub>C</sub> = 500mA		120		MHz
Collector output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 10V , I <sub>E</sub> = 0, f=1MHz			30	pF

### CLASSIFICATION OF h<sub>FE</sub>

Rank	O	Y
Range	100-200	160-320