

## TO-92MOD Plastic-Encapsulate Transistors

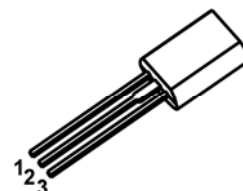
### 2SC2500 TRANSISTOR (NPN)

#### FEATURES

- Strobe Flash Applications
- Medium Power Amplifier Applications

#### TO-92MOD

1. EMITTER
2. COLLECTOR
3. BASE



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

Symbol	Parameter	Value	Unit
V <sub>CB0</sub>	Collector-Base Voltage	30	V
V <sub>CEO</sub>	Collector-Emitter Voltage	10	V
V <sub>EBO</sub>	Emitter-Base Voltage	6	V
I <sub>C</sub>	Collector Current -Continuous	2	A
P <sub>C</sub>	Collector Power Dissipation	900	mW
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55 to +150	°C

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =1mA, I <sub>E</sub> =0	30			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =0	10			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =1mA, I <sub>C</sub> =0	6			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> =6V, I <sub>C</sub> =0			0.1	μA
DC current gain	h <sub>FE(1)</sub>	V <sub>CE</sub> =1V, I <sub>C</sub> =500mA	140		600	
	h <sub>FE(2)</sub>	V <sub>CE</sub> =1V, I <sub>C</sub> =2A	70			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =2A, I <sub>B</sub> =50mA			0.5	V
Base-emitter voltage	V <sub>BE</sub>	V <sub>CE</sub> =1V, I <sub>C</sub> =2A			1.5	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =1V, I <sub>C</sub> =500mA		150		MHz
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz		27		pF

#### CLASSIFICATION OF h<sub>FE(1)</sub>

Rank	A	B	C	D
Range	140-240	200-330	300-450	420-600