



## TO-92 Plastic-Encapsulate Transistors

### 2SC536 TRANSISTOR (NPN)

#### FEATURES

Power dissipation

$$P_{CM}: 400 \text{ mW (Tamb=25°C)}$$

Collector current

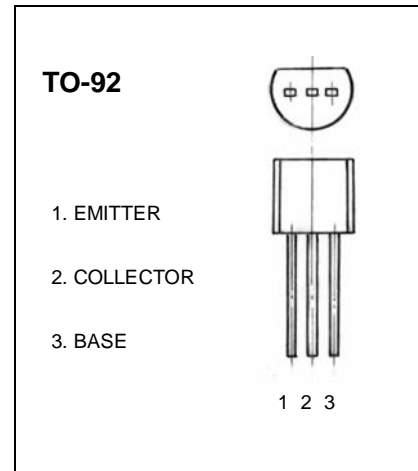
$$I_{CM}: 100 \text{ mA}$$

Collector-base voltage

$$V_{(BR)CBO}: 40 \text{ V}$$

Operating and storage junction temperature range

$$T_J, T_{stg}: -55^\circ\text{C to } +150^\circ\text{C}$$



#### ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu\text{A}, I_E=0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	30			V
Emitter-Base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu\text{A}, I_C=0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=35\text{V}, I_E=0$			1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=4\text{V}, I_C=0$			1	$\mu\text{A}$
DC current gain	$h_{FE}$	$V_{CE}=6\text{V}, I_C=1\text{mA}$	60		960	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=50\text{mA}, I_B=5\text{mA}$			0.5	V
Transition frequency	$f_T$	$V_{CE}=6\text{V}, I_C=1\text{mA}$		100		MHz
Collector output capacitance	$C_{ob}$	$V_{CE}=6\text{V}, f=1\text{MHz}$		3.5		pF

#### CLASSIFICATION OF $h_{FE}$

Rank	D	E	F	G	H
Range	60-120	100-200	160-320	280-560	480-960