



## TO-92MOD Plastic-Encapsulated Transistors

### 2SC1627A TRANSISTOR (NPN)

#### FEATURE

Power dissipation

$$P_{CM}: 0.8 \text{ W (Tamb=25}^\circ\text{C)}$$

Collector current

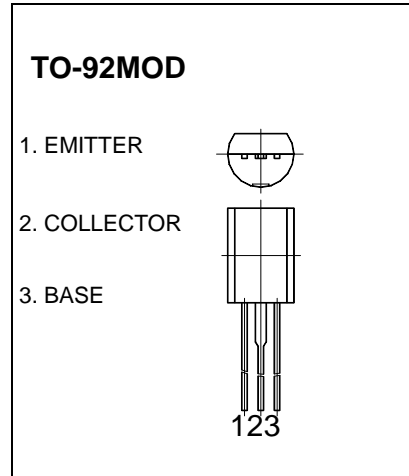
$$I_{CM}: 0.4 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO}: 80 \text{ V}$$

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	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100\mu\text{A}, I_E = 0$	80		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 5\text{mA}, I_B = 0$	80		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 100\mu\text{A}, I_C = 0$	5		V
Collector cut-off current	$I_{CBO}$	$V_{CB} = 50\text{V}, I_E = 0$		0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 5\text{V}, I_C = 0$		0.1	$\mu\text{A}$
DC current gain	$h_{FE(1)}$	$V_{CE} = 2 \text{ V}, I_C = 50\text{mA}$	70	240	
	$h_{FE(2)}$	$V_{CE} = 2 \text{ V}, I_C = 200\text{mA}$	40		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 200\text{mA}, I_B = 20\text{mA}$		0.4	V
Base-emitter voltage	$V_{BE(on)}$	$V_{CE} = 2\text{V}, I_C = 5\text{mA}$	0.55	0.8	V
Transition frequency	$f_T$	$V_{CE} = 10 \text{ V}, I_C = 10\text{mA}$	80		MHz

#### CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	70-140	120-240