



# TO-92 Plastic-Encapsulate Transistors

## **MPSA27** TRANSISTOR ( NPN )

### FEATURES

Power dissipation

$$P_{CM}: 0.625 \text{ W (Tamb=25}^\circ\text{C)}$$

Collector current

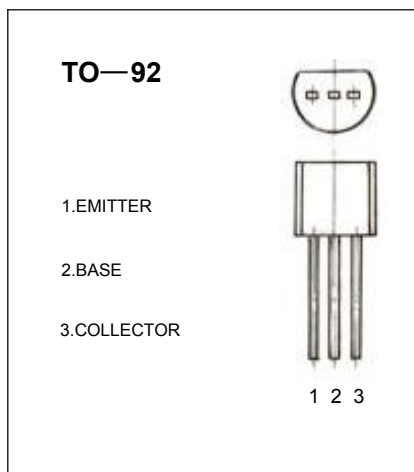
$$I_{CM}: 0.8 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO}: 60 \text{ V}$$

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	$V_{(BR)CBO}$	$I_C=10\mu\text{A}, I_E=0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=100\mu\text{A}, I_B=0$	60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_C=100\mu\text{A}, I_C=0$	10			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=50\text{V}, I_E=0$			100	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=10\text{V}, I_B=0$			100	$\mu\text{A}$
DC current gain(note)	$H_{FE(1)}$	$V_{CE}=5\text{V}, I_C=10\text{mA}$	10000			
DC current gain(note)	$H_{FE(2)}$	$V_{CE}=5\text{V}, I_C=100\text{mA}$	10000			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100\text{mA}, I_B=0.1\text{mA}$			1.5	V
Base-emitter voltage	$V_{BE}$	$V_{CE}=5\text{V}, I_C=100\text{mA}$			2.0	V

### CLASSIFICATION OF HFE

Rank	1	2	3
Range	10000-15000	15000-20000	20000-30000