



TO-92 Plastic-Encapsulate Transistors

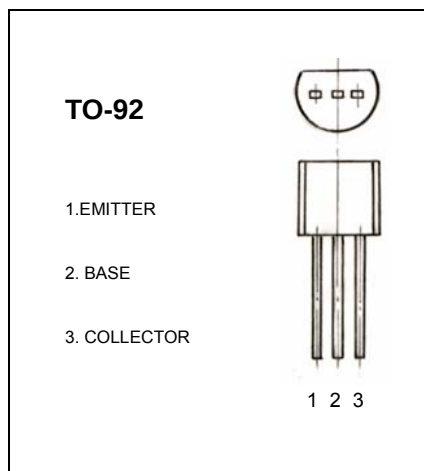
MPSA17 TRANSISTOR (NPN)

FEATURES

High $V_{(BR)EBO}$: 12V

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CEO}	Collector-Ease Voltage	40	V
V_{EBO}	Emitter-Base Voltage	12	V
I_C	Collector Current -Continuous	0.1	A
P_C	Collector Power Dissipation	300	mW
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55 to +150	$^{\circ}\text{C}$



ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}$, $I_E=0$	40		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu\text{A}$, $I_C=0$	12		V
Collector cut-off current	I_{CBO}	$V_{CB}=30\text{V}$, $I_E=0$		0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=10\text{V}$, $I_C=0$		0.1	μA
DC current gain	h_{FE}	$V_{CE}=10\text{V}$, $I_C=5\text{mA}$	200	800	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=10\text{mA}$, $I_B=1\text{mA}$		0.25	V
Transition frequency	f_T	$V_{CE}=10\text{V}$, $I_C=5\text{mA}$, $f=100\text{MHz}$	80		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$		4	pF

Typical Characteristics

MPSA17

