

PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

MPSA92

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FEATURES

- * High voltage

APPLICATIONS

- * Telephone dialler circuits



E-Line
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-300	V
Collector-Emitter Voltage	V_{CEO}	-300	V
Emitter-Base Voltage	V_{EBO}	-5	V
Continuous Collector Current	I_C	-500	mA
Power Dissipation at $T_{amb} = 25^\circ\text{C}$	P_{tot}	680	mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +175	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^\circ\text{C}$).

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-300			V	$I_C = -100\mu\text{A}$, $I_E = 0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-300			V	$I_C = -1\text{mA}$, $I_B = 0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5			V	$I_E = -10\mu\text{A}$, $I_C = 0$
Collector Cut-Off Current	I_{CBO}			-0.25	μA	$V_{CB} = -200\text{V}$, $I_E = 0$
Emitter Cut-Off Current	I_{EBO}			-0.1	μA	$V_{EB} = -3\text{V}$, $I_E = 0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.5	V	$I_C = -20\text{mA}$, $I_B = -2\text{mA}^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			-0.9	V	$I_C = -20\text{mA}$, $I_B = -2\text{mA}^*$
Static Forward Current Transfer Ratio	h_{FE}	25 40 25				$I_C = -1\text{mA}$, $V_{CE} = 10\text{V}^*$ $I_C = -10\text{mA}$, $V_{CE} = 10\text{V}^*$ $I_C = -30\text{mA}$, $V_{CE} = -10\text{V}^*$
Transition Frequency	f_T	50			MHz	$I_C = -10\text{mA}$, $V_{CE} = -20\text{V}$ $f = 20\text{MHz}$
Output Capacitance	C_{obo}			6	pF	$V_{CB} = -20\text{V}$, $f = 1\text{MHz}$

*Measured under pulsed conditions. Pulse width=300 μs . Duty cycle $\leq 2\%$

TYPICAL CHARACTERISTICS

