



## TO-92 Plastic-Encapsulated Transistors

### 2N6520 TRANSISTOR (PNP)

#### FEATURES

Power dissipation

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

Collector current

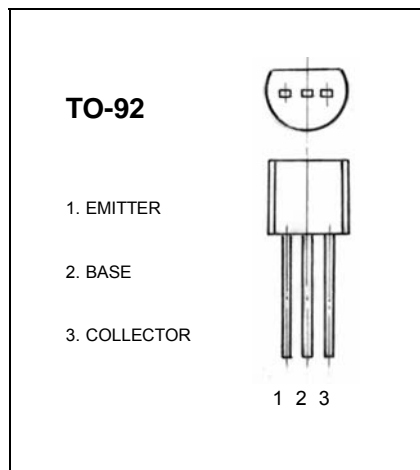
$$I_{CM} : -0.5 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO} : -350 \text{ V}$$

Operating and storage junction temperature range

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



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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100 \mu A, I_E = 0$	-350			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}^*$	$I_C = -1 \text{ mA}, I_B = 0$	-350			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10 \mu A, I_C = 0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -250 \text{ V}, I_E = 0$			-0.05	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -4 \text{ V}, I_C = 0$			-0.05	$\mu A$
DC current gain	$h_{FE}$	$V_{CE} = -10 \text{ V}, I_C = -1 \text{ mA}$ $V_{CE} = -10 \text{ V}, I_C = -10 \text{ mA}$ $V_{CE} = -10 \text{ V}, I_C = -30 \text{ mA}$ $V_{CE} = -10 \text{ V}, I_C = -50 \text{ mA}$ $V_{CE} = -10 \text{ V}, I_C = -100 \text{ mA}$	20 30 30 20 15		200 200	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA}$ $I_C = -20 \text{ mA}, I_B = -2 \text{ mA}$ $I_C = -30 \text{ mA}, I_B = -3 \text{ mA}$ $I_C = -50 \text{ mA}, I_B = -5 \text{ mA}$			-0.3 -0.35 -0.5 -1	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA}$ $I_C = -20 \text{ mA}, I_B = -2 \text{ mA}$ $I_C = -30 \text{ mA}, I_B = -3 \text{ mA}$			-0.75 -0.85 -0.9	V
Base-emitter voltage	$V_{BE(on)}$	$V_{CE} = -10 \text{ V}, I_C = -100 \text{ mA}$			-2	V
Transition frequency	$f_T^*$	$V_{CE} = -20 \text{ V}, I_C = -10 \text{ mA}$ $f = 20 \text{ MHz}$	40		200	MHz

\* Pulse test, Pulse width  $\leq 300 \mu s$ , Duty cycle  $\leq 2\%$ .