



ShenzhenTaimaoTechnology Co.,Ltd.

TO-92 Plastic-Encapsulate Transistors

2N6517 TRANSISTOR (NPN)

FEATURES

- Complement to 2N6520

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

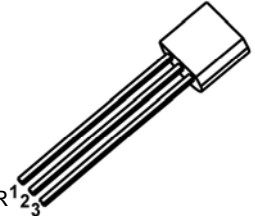
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	350	V
V_{CEO}	Collector-Emitter Voltage	350	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current	0.5	A
P_C	Collector Power Dissipation	625	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	200	$^{\circ}\text{C}/\text{W}$
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^{\circ}\text{C}$

TO - 92

1. EMITTER

2. BASE

3. COLLECTOR



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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=0.1\text{mA}, I_E=0$	350			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	350			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=0.01\text{mA}, I_C=0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB}=250\text{V}, I_E=0$			0.05	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$			0.05	μA
DC current gain	h_{FE}^*	$V_{CE}=10\text{V}, I_C=1\text{mA}$	20			
		$V_{CE}=10\text{V}, I_C=10\text{mA}$	30			
		$V_{CE}=10\text{V}, I_C=30\text{mA}$	30		200	
		$V_{CE}=10\text{V}, I_C=50\text{mA}$	20		200	
		$V_{CE}=10\text{V}, I_C=100\text{mA}$	15			
Collector-emitter saturation voltage	$V_{CE(sat)}^*$	$I_C=10\text{mA}, I_B=1\text{mA}$			0.3	V
		$I_C=50\text{mA}, I_B=5\text{mA}$			1	V
Base-emitter saturation voltage	$V_{BE(sat)}^*$	$I_C=10\text{mA}, I_B=1\text{mA}$			0.75	V
		$I_C=20\text{mA}, I_B=2\text{mA}$			0.85	V
		$I_C=30\text{mA}, I_B=3\text{mA}$			0.9	V
Base-emitter voltage	V_{BE}^*	$V_{CE}=10\text{V}, I_C=100\text{mA}$			2	V
Transition frequency	f_T^*	$V_{CE}=20\text{V}, I_C=10\text{mA}, f=20\text{MHz}$	40		200	MHz
Collector output capacitance	C_{ob}	$V_{CB}=20\text{V}, I_E=0, f=1\text{MHz}$			6	pF

*Pulse test: pulse width $\leq 300\mu\text{s}$, duty cycles $\leq 2.0\%$.