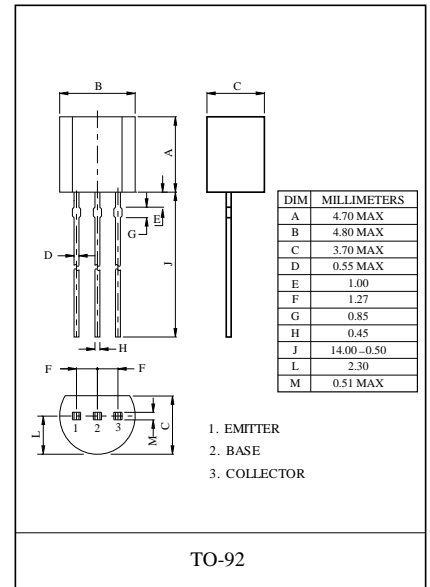


## 2N6517 TRANSISTOR (NPN)

### 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	$^\circ\text{C}$

### 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	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5\text{V}, I_C=0$			0.05	$\mu\text{A}$
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  $\leq 2.0\%$ .