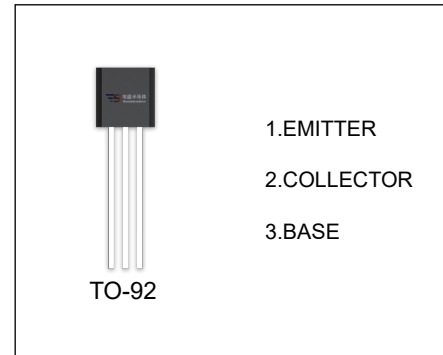


2N6517 TRANSISTOR (NPN)

FEATURES

- Complement to 2N6520



ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
2N6517	TO-92	Bulk	1000pcs/Bag
2N6517-TA	TO-92	Tape	2000pcs/Box

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	350	V
V _{CEO}	Collector-Emitter Voltage	350	V
V _{EB0}	Emitter-Base Voltage	6	V
I _C	Collector Current -Continuous	0.5	A
P _D	Collector Power Dissipation	625	mW
R _{θJA}	Thermal Resistance from Junction to Ambient	200	°C /W
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

$T_a=25\text{ }^\circ\text{C}$ 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 cycle $\leq 2.0\%$.