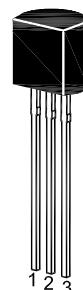


# 2N6517

## NPN Silicon Epitaxial Planar Transistor

for switching and AF amplifier applications.

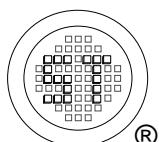
On special request, these transistors can be manufactured in different pin configurations.



1. Emitter 2. Base 3. Collector  
TO-92 Plastic Package

### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Collector Base Voltage	$V_{CBO}$	350	V
Collector Emitter Voltage	$V_{CEO}$	350	V
Emitter Base Voltage	$V_{EBO}$	6	V
Collector Current	$I_C$	500	mA
Power Dissipation	$P_{tot}$	625	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150	$^\circ\text{C}$



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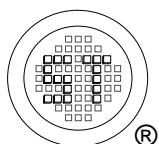
ISO/TS 16949 : 2009 ISO14001 : 2004 ISO 9001 : 2008 BS-OHSAS 18001 : 2007 IECQ QC 080000  
Certificate No. 16073300 Certificate No. 7116 Certificate No. 50719410 Certificate No. 7116 Certificate No. PRC-HSPM-1403-1  
SGS

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# 2N6517

## Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $V_{CE} = 10 \text{ V}$ , $I_C = 1 \text{ mA}$ at $V_{CE} = 10 \text{ V}$ , $I_C = 10 \text{ mA}$ at $V_{CE} = 10 \text{ V}$ , $I_C = 30 \text{ mA}$ at $V_{CE} = 10 \text{ V}$ , $I_C = 50 \text{ mA}$ at $V_{CE} = 10 \text{ V}$ , $I_C = 100 \text{ mA}$	$h_{FE}$	20 30 30 20 15	- - 200 200 -	- - - - -
Collector Base Cutoff Current at $V_{CB} = 250 \text{ V}$	$I_{CBO}$	-	50	nA
Emitter Base Cutoff Current at $V_{EB} = 5 \text{ V}$	$I_{EBO}$	-	50	nA
Collector Base Breakdown Voltage at $I_C = 100 \mu\text{A}$	$V_{(BR)CBO}$	350	-	V
Collector Emitter Breakdown Voltage at $I_C = 1 \text{ mA}$	$V_{(BR)CEO}$	350	-	V
Emitter Base Breakdown Voltage at $I_E = 10 \mu\text{A}$	$V_{(BR)EBO}$	6	-	V
Collector Emitter Saturation Voltage at $I_C = 10 \text{ mA}$ , $I_B = 1 \text{ mA}$ at $I_C = 20 \text{ mA}$ , $I_B = 2 \text{ mA}$ at $I_C = 30 \text{ mA}$ , $I_B = 3 \text{ mA}$ at $I_C = 50 \text{ mA}$ , $I_B = 5 \text{ mA}$	$V_{CE(\text{sat})}$	- - - -	0.3 0.35 0.5 1	V V V V
Base Emitter Saturation Voltage at $I_C = 10 \text{ mA}$ , $I_B = 1 \text{ mA}$ at $I_C = 20 \text{ mA}$ , $I_B = 2 \text{ mA}$ at $I_C = 30 \text{ mA}$ , $I_B = 3 \text{ mA}$	$V_{BE(\text{sat})}$	- - -	0.75 0.85 0.9	V V V
Base Emitter On Voltage at $V_{CE} = 10 \text{ V}$ , $I_C = 100 \text{ mA}$	$V_{BE(\text{on})}$	-	2	V
Gain Bandwidth Product at $V_{CE} = 20 \text{ V}$ , $I_C = 10 \text{ mA}$ , $f = 20 \text{ MHz}$	$f_T$	40	200	MHz
Collector Base Capacitance at $V_{CB} = 20 \text{ V}$ , $f = 1 \text{ MHz}$	$C_{cb}$	-	6	pF



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