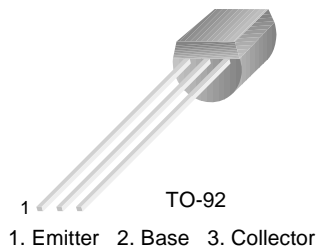


2N6517

High Voltage Transistor

- Collector-Emitter Voltage: $V_{CE0}=350V$
- Collector Dissipation: P_C (max)=625mW
- Complement to 2N6520
- Suffix "-C" means Center Collector (1. Emitter 2. Collector 3. Base)



NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_a=25^\circ C$ unless otherwise noted

Symbol	Parameter	Value	Units
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	500	mA
P_C	Collector Power Dissipation	625	mW
T_J	Junction Temperature	150	$^\circ C$
T_{STG}	Storage Temperature	-55 ~ 150	$^\circ C$

• Refer to 2N6515 for graphs

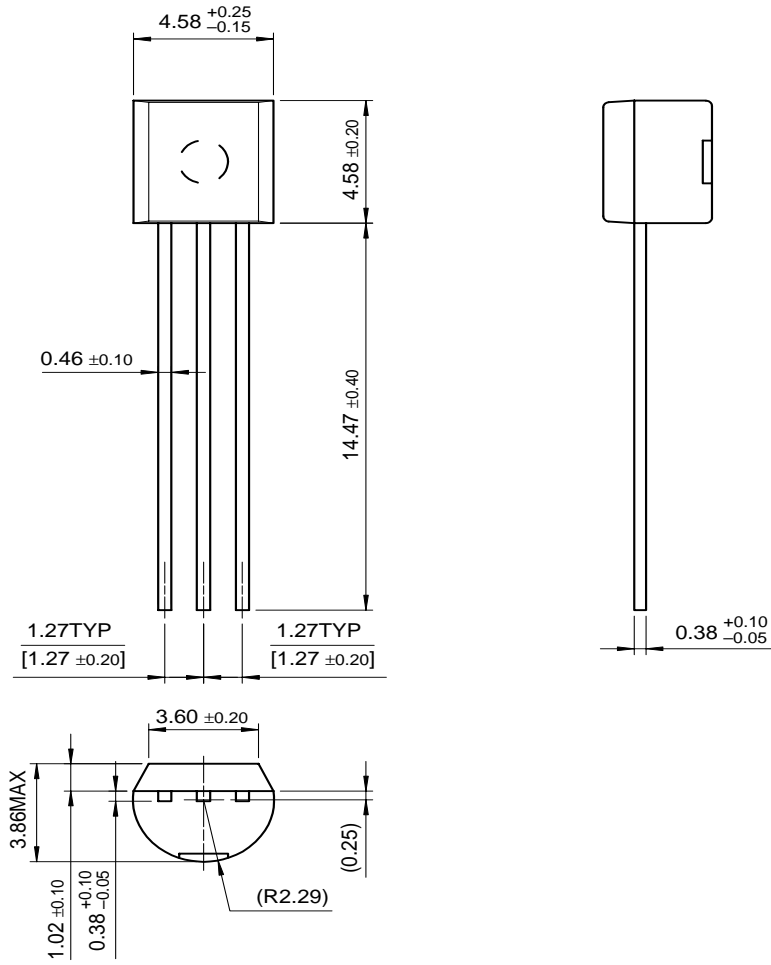
Electrical Characteristics $T_a=25^\circ C$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CEO}	* Collector-Emitter Breakdown Voltage	$I_C=1mA, I_B=0$	350			V
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C=100\mu A, I_E=0$	350			V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E=10\mu A, I_C=0$	6			V
I_{CBO}	Collector Cut-off Current	$V_{CB}=250V, I_E=0$			50	nA
I_{EBO}	Emitter Cut-off Current	$V_{EB}=5V, I_C=0$			50	nA
h_{FE}	* DC Current Gain	$I_C=1mA, V_{CE}=10V$ $I_C=10mA, V_{CE}=10V$ $I_C=30mA, V_{CE}=10V$ $I_C=50mA, V_{CE}=10V$ $I_C=100mA, V_{CE}=10V$	20 30 30 20 15		200 200	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=10mA, I_B=1mA$ $I_C=20mA, I_B=2mA$ $I_C=30mA, I_B=3mA$ $I_C=50mA, I_B=5mA$			0.3 0.35 0.5 1	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=10mA, I_B=1mA$ $I_C=20mA, I_B=2mA$ $I_C=30mA, I_B=3mA$			0.75 0.85 0.9	V
C_{ob}	Output Capacitance	$V_{CB}=20V, I_E=0, f=1MHz$			6	pF
f_T	* Current Gain Bandwidth Product	$I_C=10mA, V_{CE}=20V, f=20MHz$	40		200	MHz
$V_{BE(on)}$	Base Emitter On Voltage	$I_C=100mA, V_{CE}=10V$			2	V

* Pulse Test: Pulse Width $\leq 300\mu s$, Duty Cycle $\leq 2\%$

Package Dimensions

TO-92



Dimensions in Millimeters

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Definition of Terms

Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
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Obsolete	Not In Production	This datasheet contains specifications on a product that has been discontinued by Fairchild semiconductor. The datasheet is printed for reference information only.

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2N6517

NPN Epitaxial Silicon Transistor

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Features

- Collector-Emitter Voltage $V_{CEO}=350V$
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Applications

High Voltage Transistor

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Product status/pricing/packageing

BUY

BUY

Datasheet

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Product	Product status	Pb-free Status	Pricing*	Package type	Leads	Packing method	Package Marking Convention**
2N6517BU	Full Production	Full Production	\$0.0296	TO-92	3	BULK	Line 1: 2N Line 2: 6517 Line 3: -&3
2N6517CUBU	Full Production	Full Production	\$0.0296	TO-92	3	BULK	Line 1: 2N Line 2: 6517 Line 3: C&3

2N6517CTA	Full Production	 Full Production	\$0.033	TO-92	3	AMMO	Line 1: 2N Line 2: 6517 Line 3: C&3
2N6517CTA_NL	Full Production	 Full Production	N/A	TO-92	3	AMMO	Line 1: 2N Line 2: 6517 Line 3: C&3
2N6517TA	Full Production	 Full Production	\$0.0296	TO-92	3	AMMO	Line 1: 2N Line 2: 6517 Line 3: -&3

* Fairchild 1,000 piece Budgetary Pricing

** A sample button will appear if the part is available through Fairchild's on-line samples program. If there is no sample button, please contact a [Fairchild distributor](#) to obtain samples



Indicates product with Pb-free second-level interconnect. For more information [click here](#).

Package marking information for product 2N6517 is available. [Click here for more information](#).

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Models

Package & leads	Condition	Temperature range	Vcc range	Software version	Revision date
PSPICE					
TO-92-3	Electrical/Thermal	-55°C to 150°C	0V to 300V	9.2	Oct 8, 2003

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Qualification Support

Click on a product for detailed qualification data

Product
2N6517BU
2N6517CBU
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2N6517TA

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