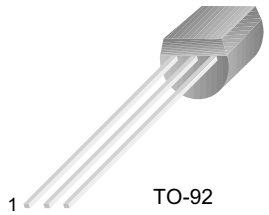
FAIRCHILD
SEMICONDUCTOR TM

2N5550

Amplifier Transistor

- Collector-Emitter Voltage: V_{CEO}= 140V
- Collector Dissipation: P_C (max)=625mW



TO-92

1. Emitter 2. Base 3. Collector

NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings T_a=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	160	V
V_{CEO}	Collector-Emitter Voltage	140	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current	600	mA
P_C	Collector Dissipation	625	mW
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 ~ 150	°C

• Refer to 2N5551 for graphs

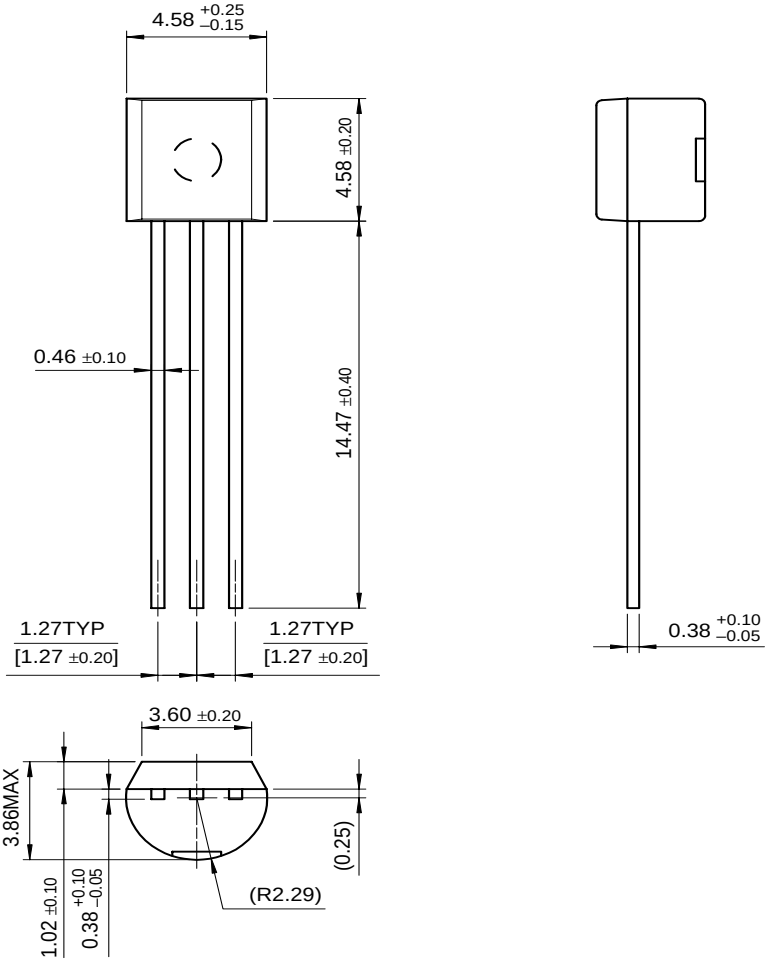
Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	I_C=100μA, I_E=0	160			V
BV_{CEO}	* Collector-Emitter Breakdown Voltage	I_C=1mA, I_B=0	140			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E=10μA, I_C=0	6			V
I_{CBO}	Collector Cut-off Current	V_{CB}=100V, I_E=0			100	nA
I_{EBO}	Emitter Cut-off Current	V_{EB}= 4V, I_C=0			50	nA
h_{FE}	* DC Current Gain	I_C=1mA, V_{CE}=5V I_C=10mA, V_{CE}=5V I_C=50mA, V_{CE}=5V	60 60 20		 250 	
V_{CE} (sat)	* Collector-Emitter Saturation Voltage	I_C=10mA, I_B=1mA I_C=50mA, I_B=5mA			0.15 0.25	V V
V_{BE} (sat)	* Base-Emitter Saturation Voltage	I_C=10mA, I_B=1mA I_C=50mA, I_B=5mA			1 1.2	V V
f_T	Current Gain Bandwidth Product	I_C=10mA, V_{CE}=10V, f=100MHz	100		300	MHz
C_{ob}	Output Capacitance	V_{CB}=10V, I_E=0, f=1MHz			6	pF
NF	Noise Figure	I_C=250μA, V_{CE}=5V R_S=1KΩ f=10Hz to 15.7KHz			10	dB

* Pulse Test: Pulse Width≤300μs, Duty Cycle≤2%

Package Demensions

TO-92



Dimensions in Millimeters

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2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

PRODUCT STATUS DEFINITIONS

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.
Preliminary	First Production	This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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.

2N5550

NPN Epitaxial Silicon Transistor

Contents

BUY

Datasheet
Download this datasheet

e-mail this datasheet

This page
Print version

Related Links

- Request samples
- How to order products
- Product Change Notices (PCNs)
- Support
- Sales support
- Quality and reliability
- Design center

Features

- Collector-Emitter Voltage V_{CEO}=140V
- Collector Dissipation: P_C(max)=625mW

back to top

Applications

Amplifier Transistor

back to top

Product status/pricing/packaging

BUY

Product	Product status	Pb-free Status	Pricing*	Package type	Leads	Packing method	Package Marking Convention**
2N5550BU	Full Production	Full Production	$0.0265	TO-92	3	BULK	Line 1: 2N Line 2: 5550 Line 3: -&3
2N5550TA	Full Production	Full Production	$0.0265	TO-92	3	AMMO	Line 1: 2N Line 2: 5550 Line 3: -&3

2N5550TAR	Full Production	Full Production	$0.0265	TO-92	3	AMMO	Line 1: 2N Line 2: 5550 Line 3: -&3
2N5550TF	Full Production	Full Production	$0.0265	TO-92	3	TAPE REEL	Line 1: 2N Line 2: 5550 Line 3: -&3
2N5550TFR	Full Production	Full Production	$0.0265	TO-92	3	TAPE REEL	Line 1: 2N Line 2: 5550 Line 3: -&3
2N5550_D26Z	Full Production	Full Production	N/A	TO-92	3	TAPE REEL	Line 1: **$Y** (Fairchild logo) &**Z** (Asm. Plant Code) &**3** (3-Digit Date Code) Line 2: 2N Line 3: 5550

* 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 2N5550 is available. Click here for more information .

back to top

Models

Package & leads	Condition	Temperature range	Software version	Revision date
PSPICE				
TO-92-3	Electrical	25°C	N/A	N/A

back to top

Qualification Support

Click on a product for detailed qualification data

Product
2N5550BU
2N5550TA

2N5550TAR
2N5550TF
2N5550TFR
2N5550_D26Z

back to top