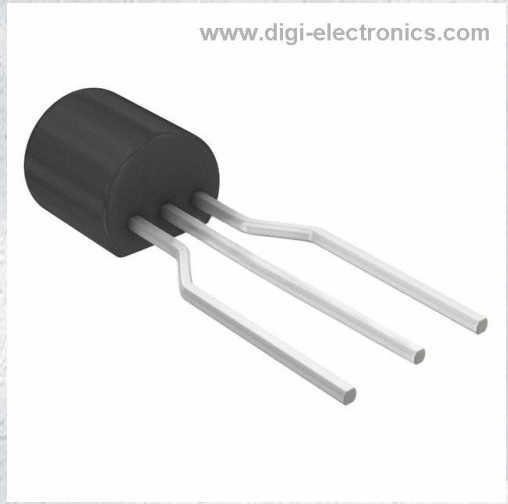
PN3569_D26Z Datasheet



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DiGi Electronics Part Number	PN3569_D26Z-DG
Manufacturer	onsemi
Manufacturer Product Number	PN3569_D26Z
Description	TRANS NPN 40V 0.5A TO92-3
Detailed Description	Bipolar (BJT) Transistor NPN 40 V 500 mA 625 mW T hrough Hole TO-92-3

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
PN3569_D26Z	onsemi
Series:	Product Status:
-	Obsolete
Transistor Type:	Current - Collector (Ic) (Max):
NPN	500 mA
Voltage - Collector Emitter Breakdown (Max):	Vce Saturation (Max) @ Ib, Ic:
40 V	250mV @ 15mA, 150mA
Current - Collector Cutoff (Max):	DC Current Gain (hFE) (Min) @ Ic, Vce:
50nA (ICBO)	100 @ 150mA, 1V
Power - Max:	Frequency - Transition:
625 mW	-
Operating Temperature:	Mounting Type:
-55°C ~ 150°C (TJ)	Through Hole
Package / Case:	Supplier Device Package:
TO-226-3, TO-92-3 (TO-226AA) Formed Leads	TO-92-3
Base Product Number:	
PN356	

Environmental & Export classification

Moisture Sensitivity Level (MSL):	REACH Status:
1 (Unlimited)	REACH Unaffected
ECCN:	HTSUS:
EAR99	8541.21.0095

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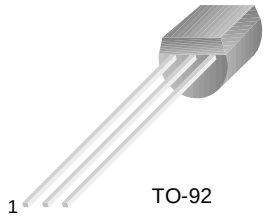
PN3569

NPN General Purpose Amplifier

- This device is designed for use at general purpose amplifiers and switches requiring collecor currents to 300mA.



TO-92

1. Emitter 2. Base 3. Collector

Absolute Maximum Ratings* T_a=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CEO}	Collector-Emitter Voltage	40	V
V_{CBO}	Collector-Base Voltage	80	V
V_{EBO}	Emitter-Base Voltage	5.0	V
I_C	Collector Current - Continuous	500	mA
T_J, T_{STG}	Operating and Storage Junction Temperature Range	- 55 ~ 150	°C

* These ratings are limiting values above whitch the serviceability of any semiconductor device may be impaird.

NOTES:
1. These ratings are based on a maximum junction temperature of 150 degrees C.
2. These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
Off Characteristics					
$V_{(BR)CEO}$	Collector-Emitter Sustaining Voltage *	I_C = 30μA, I_B = 0	40		V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C = 100μA, I_E = 0	80		
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E = 10μA, I_C = 0	5.0		V
I_{CBO}	Collector Cutoff Current	V_{CB} = 40V, I_E = 0		50	nA
I_{EBO}	Emitter Cut-off Current	V_{EB} = 4.0V, I_C = 0		25	nA
On Characteristics					
h_{FE}	DC Current Gain	V_{CE} = 1V, I_C = 150mA V_{CE} = 1V, I_C = 30mA	100 100	300	
V_{CE}(sat)	Collector-Emitter Saturation Voltage	I_C = 150mA, I_B = 15mA		0.25	V
V_{BE}(on)	Base-Emitter On Voltage	I_C = 150mA, V_{CE} = 1V		1.1	V
Small Signal Characteristics					
h_{fe}	Small Signal current Gain	I_C = 50mA, V_{CE} = 10V, f = 10MHz	3.0	30	

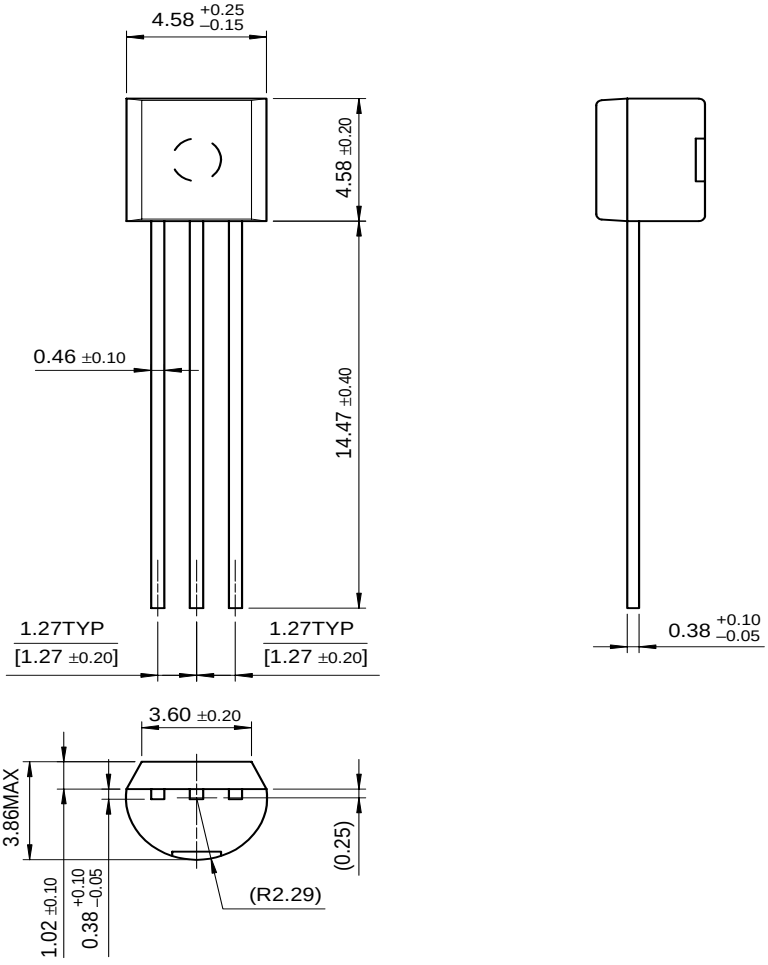
* Pulse Test: Pulse Width ≤ 300μs, Duty Cycle ≤ 2.0%

Thermal Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Max.	Units
P_D	Total Device Dissipation Derate above 25°C	625 5.0	mW mW/°C
$R_{\theta JC}$	Thermal Resistance, Junction to Case	83.3	°C/W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	200	°C/W

Package Dimensions

TO-92



Dimensions in Millimeters

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Definition of Terms

Datasheet Identification	Product Status	Definition
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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.

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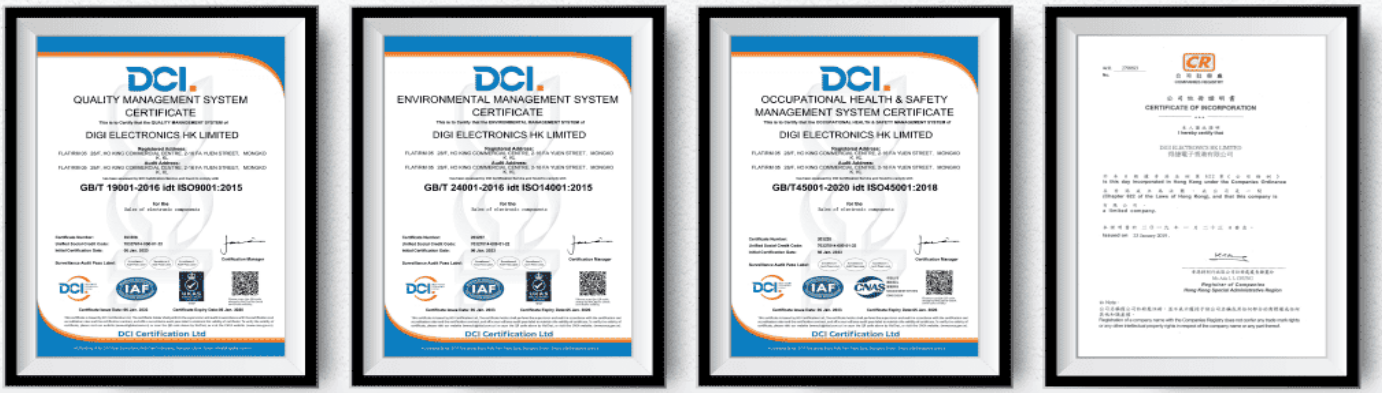

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