

2N6548
2N6549

**NPN SILICON
DARLINGTON TRANSISTOR**



TO-202 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N6548 series types are NPN silicon Darlington transistors designed for amplifier and driver applications where high gain at a high collector current is important.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

Collector-Base Voltage
Collector-Emitter Voltage
Collector-Emitter Voltage
Emitter-Base Voltage
Continuous Collector Current
Continuous Base Current
Power Dissipation
Power Dissipation ($T_C=25^\circ\text{C}$)
Operating and Storage Junction Temperature
Thermal Resistance
Thermal Resistance

SYMBOL

V_{CBO}	50
V_{CES}	40
V_{CEO}	40
V_{EBO}	12
I_C	2.0
I_B	0.1
P_D	2.0
P_D	10
T_J, T_{stg}	-65 to +150
θ_{JA}	62.5
θ_{JC}	12.5

UNITS

V
V
V
V
A
A
W
W
$^\circ\text{C}$
$^\circ\text{C/W}$
$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$)

SYMBOL TEST CONDITIONS

I_{CBO}	$V_{CB}=30\text{V}$
I_{EBO}	$V_{EB}=10\text{V}$
BV_{CBO}	$I_C=100\mu\text{A}$
BV_{CES}	$I_C=100\mu\text{A}$
BV_{EBO}	$I_E=10\mu\text{A}$
$V_{CE(SAT)}$	$I_C=1.0\text{A}, I_B=2.0\text{mA}$
$V_{CE(SAT)}$	$I_C=2.0\text{A}, I_B=4.0\text{mA}$
$V_{BE(SAT)}$	$I_C=1.0\text{A}, I_B=2.0\text{mA}$
$V_{BE(ON)}$	$V_{CE}=5.0\text{V}, I_C=1.0\text{A}$
h_{FE}	$V_{CE}=5.0\text{V}, I_C=200\text{mA}$
h_{FE}	$V_{CE}=5.0\text{V}, I_C=500\text{mA}$
h_{FE}	$V_{CE}=5.0\text{V}, I_C=1.0\text{A}$
h_{fe}	$V_{CE}=5.0\text{V}, I_C=50\text{mA}, f=1.0\text{kHz}$
f_T	$V_{CE}=5.0\text{V}, I_C=200\text{mA}, f=100\text{MHz}$
C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$

2N6548

MIN	MAX
-	100
-	100
50	-
40	-
12	-
-	1.5
-	2.0
-	2.0
-	2.0
25K	150K
15K	-
5K	-
20K	-
100	-
-	7.0

2N6549

MIN	MAX
-	100
-	100
50	-
40	-
12	-
-	1.5
-	2.0
-	2.0
-	2.0
15K	150K
10K	-
3K	-
15K	-
100	-
-	7.0

UNITS

nA
nA
V
V
V
V
V
V
V
MHz
pF

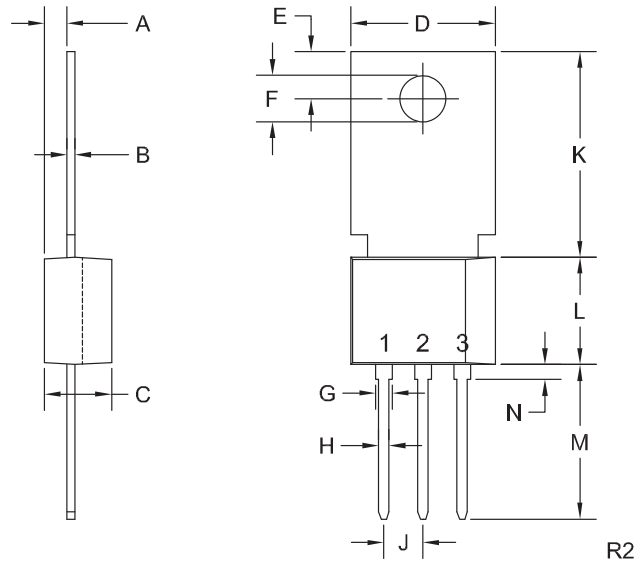
R1 (23-January 2012)

2N6548
2N6549

NPN SILICON
DARLINGTON TRANSISTOR



TO-202 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Emitter
 - 2) Base
 - 3) Collector
- Tab is common to pin 3

MARKING:

FULL PART NUMBER

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.055	0.071	1.40	1.80
B	0.016	0.024	0.40	0.60
C	0.173	0.181	4.40	4.60
D	0.374	0.413	9.50	10.5
E	0.118	0.154	3.00	3.90
F (DIA)	0.124	0.150	3.15	3.80
G	0.035	0.055	0.90	1.40
H	0.023	0.031	0.59	0.80
J	0.094	0.106	2.39	2.69
K	0.459	0.559	11.66	14.21
L	0.280	0.346	7.12	8.80
M	0.406	0.531	10.3	13.5
N	0.024	0.059	0.60	1.50

TO-202 (REV: R2)

R1 (23-January 2012)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.
145 Adams Avenue
Hauppauge, NY 11788 USA
Main Tel: (631) 435-1110
Main Fax: (631) 435-1824
Support Team Fax: (631) 435-3388
www.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

Worldwide Distributors:
www.centrasemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centrasemi.com/terms