

2N5374
2N5375

PNP SILICON TRANSISTOR



TO-92-18R CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N5374, 2N5375 types are PNP silicon transistors, manufactured by the epitaxial planar process, designed for general purpose, medium current switching applications.

MARKING: FULL PART NUMBER

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

Collector-Base Voltage
Collector-Emitter Voltage
Emitter-Base Voltage
Continuous Collector Current
Power Dissipation
Operating and Storage Junction Temperature

SYMBOL	2N5374	2N5375	UNITS
V_{CBO}	60	40	V
V_{CEO}		30	V
V_{EBO}		5.0	V
I_C		500	mA
P_D		360	mW
T_J, T_{stg}		-65 to +150	$^\circ\text{C}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CBO}	$V_{CB}=\text{Rated } V_{CBO}$		50	nA
I_{EBO}	$V_{EB}=3.0\text{V}$		50	nA
BV_{CBO}	$I_C=10\mu\text{A}$ (2N5374)	60		V
BV_{CBO}	$I_C=10\mu\text{A}$ (2N5375)	40		V
BV_{CEO}	$I_C=10\text{mA}$	30		V
BV_{EBO}	$I_E=10\mu\text{A}$	5.0		V
$V_{CE(\text{SAT})}$	$I_C=150\text{mA}, I_B=15\text{mA}$		300	mV
$V_{BE(\text{SAT})}$	$I_C=150\text{mA}, I_B=15\text{mA}$		1.3	V
$V_{BE(\text{ON})}$	$V_{CE}=10\text{V}, I_C=150\text{mA}$		1.2	V
h_{FE}	$V_{CE}=10\text{V}, I_C=1.0\text{mA}$ (2N5374)	100		
h_{FE}	$V_{CE}=10\text{V}, I_C=1.0\text{mA}$ (2N5375)	20		
h_{FE}	$V_{CE}=10\text{V}, I_C=10\text{mA}$ (2N5374)	150		
h_{FE}	$V_{CE}=10\text{V}, I_C=10\text{mA}$ (2N5375)	30		
h_{FE}	$V_{CE}=10\text{V}, I_C=150\text{mA}$ (2N5374)	200	400	
h_{FE}	$V_{CE}=10\text{V}, I_C=150\text{mA}$ (2N5375)	40	400	
C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$		10	pF
f_T	$V_{CE}=10\text{V}, I_C=20\text{mA}, f=100\text{MHz}$	150		MHz
t_{on}	$V_{CC}=30\text{V}, I_C=150\text{mA}, I_B=15\text{mA}$		50	ns
t_{off}	$V_{CC}=6.0\text{V}, I_C=150\text{mA}, I_{B1}=I_{B2}=15\text{mA}$		175	ns

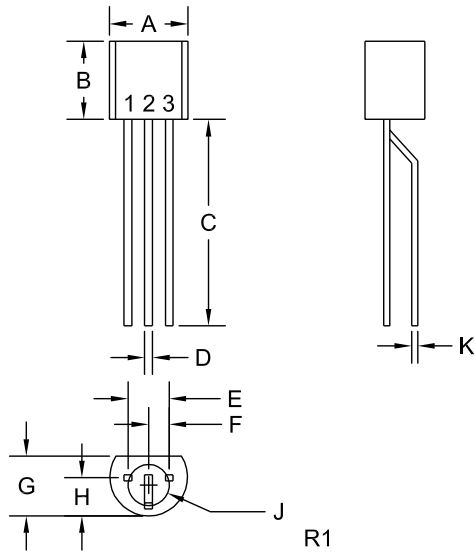
R0 (9-October 2012)

2N5374
2N5375

PNP SILICON TRANSISTOR



TO-92-18R CASE - MECHANICAL OUTLINE



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A (DIA)	0.175	0.205	4.45	5.21
B	0.170	0.210	4.32	5.33
C	0.500	-	12.70	-
D	0.016	0.022	0.41	0.56
E	0.100		2.54	
F	0.050		1.27	
G	0.125	0.165	3.18	4.19
H	0.080	0.105	2.03	2.67
J (DIA)	0.100		2.54	
K	0.015		0.38	

TO-92-18R (REV: R1)

LEAD CODE:

- 1) Collector
- 2) Base
- 3) Emitter

MARKING:

FULL PART NUMBER

R0 (9-October 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