2N4424

SILICON NPN TRANSISTOR

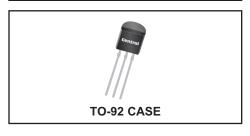


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DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N4424 is a silicon NPN epitaxial planar transistor designed for general purpose amplifier applications.





MAXIMUM RATINGS: (T _A =25°C)	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	40	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Continuous Collector Current	$I_{\mathbb{C}}$	500	mA
Power Dissipation	P_{D}	625	mW
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	200	°C/W

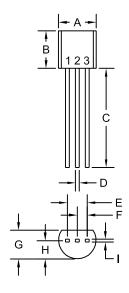
		0. 3tg			
Thermal Res	sistance	$\Theta_{\sf JA}$	2	00	°C/W
	L CHARACTERISTICS: (T _A =25°C un				
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
ICBO	V _{CB} =40V			30	nA
I _{CBO}	V _{CB} =40V, T _A =100°C			10	μΑ
ICES	V _{CE} =40V			30	nA
I _{EBO}	V _{EB} =5.0V			100	nA
BV_{CBO}	I _C =10μA	60			V
BVCEO	I _C =10mA	40			V
BV_{EBO}	I _E =0.1μA	5.0			V
V _{CE(SAT)}	I _C =50mA, I _B =3.0mA			0.30	V
V _{BE} (SAT)	I _C =50mA, I _B =3.0mA			0.85	V
h _{FE}	V _{CE} =4.5V, I _C =2.0mA	180		540	
h _{fe}	V_{CE} =4.5V, I_{C} =2.0mA, f=1.0kHz	180			
h _{fe}	V _{CE} =10V, I _C =1.0mA, f=1.0kHz		180		
h _{ie}	V _{CE} =10V, I _C =1.0mA, f=1.0kHz		5100		Ω
h _{oe}	V _{CE} =10V, I _C =1.0mA, f=1.0kHz		14		μS
h _{re}	V _{CE} =10V, I _C =1.0mA, f=1.0kHz		0.27		x10 ⁻³

2N4424

SILICON **NPN TRANSISTOR**



TO-92 CASE - MECHANICAL OUTLINE



DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
A (DIA)	0.175	0.205	4.45	5.21			
В	0.170	0.210	4.32	5.33			
С	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			
Н	0.080	0.105	2.03	2.67			
	0.015		0.38				

TO-92 (REV: R1)

LEAD CODE:

- 1) Emitter 2) Collector 3) Base

R1

MARKING:

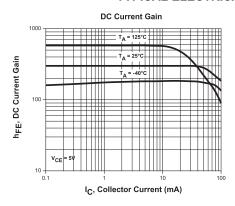
FULL PART NUMBER

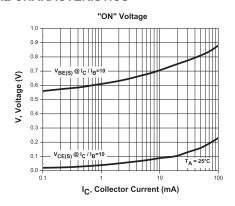
2N4424

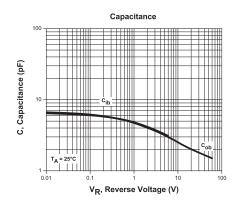
SILICON NPN TRANSISTOR

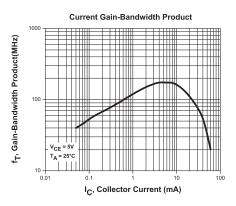


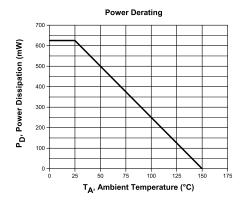
TYPICAL ELECTRICAL CHARACTERISTICS











R1 (26-July 2013)

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 guick 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

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