

**PNP TRANSISTORS** 

**TO-39 CASE** 



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# DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N3467 and 2N3468 are silicon PNP switching transistors designed for core driver applications.

## MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T <sub>A</sub> =25°C) Collector-Base Voltage	SYMBOL V <sub>CBO</sub>	<b>2N3467</b> 40	<b>2N3468</b> 50	UNITS V
Collector-Emitter Voltage	V <sub>CEO</sub>	40	50	V
Emitter-Base Voltage	V <sub>EBO</sub>	5.0		V
Continuous Collector Current	Ι <sub>C</sub>	1.	0	А
Power Dissipation	PD	1.0		W
Power Dissipation (T <sub>C</sub> =25°C)	PD	5.0		W
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to	+200	°C
Thermal Resistance	$\Theta_{JA}$	17	75	°C/W
Thermal Resistance	ΘJC	3	5	°C/W

## **ELECTRICAL CHARACTERISTICS:** (T<sub>A</sub>=25°C unless otherwise noted)

		<u>2N</u>	<u>2N3467</u>		<u>2N3468</u>	
SYMBOL	TEST CONDITIONS	MIN	MAX	MIN	MAX	UNITS
ICBO	V <sub>CB</sub> =30V	-	100	-	100	nA
ICBO	V <sub>CB</sub> =30V, T <sub>A</sub> =100°C	-	15	-	15	μA
ICEV	V <sub>CE</sub> =30V, V <sub>BE</sub> =3.0V	-	100	-	100	nA
IBEV	V <sub>CE</sub> =30V, V <sub>BE</sub> =3.0V	-	120	-	120	nA
BVCBO	Ι <sub>C</sub> =10μΑ	40	-	50	-	V
BVCEO	I <sub>C</sub> =10mA	40	-	50	-	V
BVEBO	I <sub>E</sub> =10μΑ	5.0	-	5.0	-	V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA	-	0.3	-	0.36	V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA	-	0.5	-	0.6	V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =1.0A, I <sub>B</sub> =100mA	-	1.0	-	1.2	V
V <sub>BE(SAT)</sub>	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA	-	1.0	-	1.0	V
V <sub>BE(SAT)</sub>	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA	0.8	1.2	0.8	1.2	V
V <sub>BE(SAT)</sub>	I <sub>C</sub> =1.0A, I <sub>B</sub> =100mA	-	1.6	-	1.6	V
h <sub>FE</sub>	V <sub>CE</sub> =1.0V, I <sub>C</sub> =150mA	40	-	25	-	
h <sub>FE</sub>	V <sub>CE</sub> =1.0V, I <sub>C</sub> =500mA	40	120	25	75	
h <sub>FE</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =1.0A	40	-	20	-	

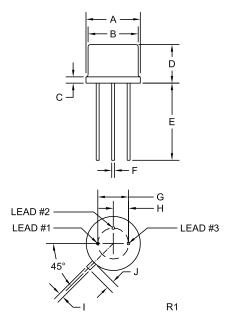


2N3467 2N3468

## SILICON PNP TRANSISTORS

## **ELECTRICAL CHARACTERISTICS - Continued:** (T<sub>A</sub>=25°C unless otherwise noted)

		<u>2N3467</u>		<u>2N3468</u>			
SYMBOL	TEST CONDITIONS	MIN	MAX	MIN	MAX	UNITS	
fT	V <sub>CE</sub> =10V, I <sub>C</sub> =50mA, f=100MHz	175	-	150	-	MHz	
Cob	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=100kHz	-	25	-	25	pF	
C <sub>ib</sub>	V <sub>EB</sub> =0.5V, I <sub>C</sub> =0, f=100kHz	-	100	-	100	pF	
t <sub>on</sub>	$V_{CC}$ =30V, $V_{BE}$ =2.0V, $I_{C}$ =500mA, $I_{B1}$ =50mA	-	40	-	40	ns	
toff	$V_{CC}$ =30V, I <sub>C</sub> =500mA, I <sub>B1</sub> =I <sub>B2</sub> =50mA	-	90	-	90	ns	
QT	V <sub>CC</sub> =30V, I <sub>C</sub> =500mA, I <sub>B</sub> =50mA	-	6.0	-	6.0	nC	



TO-39 CASE	MECHANICAL	OUTLINE
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DIMENSIONS				
	INCHES		MILLIM	ETERS
SYMBOL	MIN	MAX	MIN	MAX
A (DIA)	0.335	0.370	8.51	9.40
B (DIA)	0.315	0.335	8.00	8.51
С	-	0.040	-	1.02
D	0.240	0.260	6.10	6.60
Е	0.500	-	12.70	-
F (DIA)	0.016	0.021	0.41	0.53
G (DIA)	0.200		5.	08
Н	0.100		2.	54
	0.028	0.034	0.71	0.86
J	0.029	0.045	0.74	1.14
TO 20 (PE\/- P1)				

TO-39 (REV: R1)

LEAD CODE:

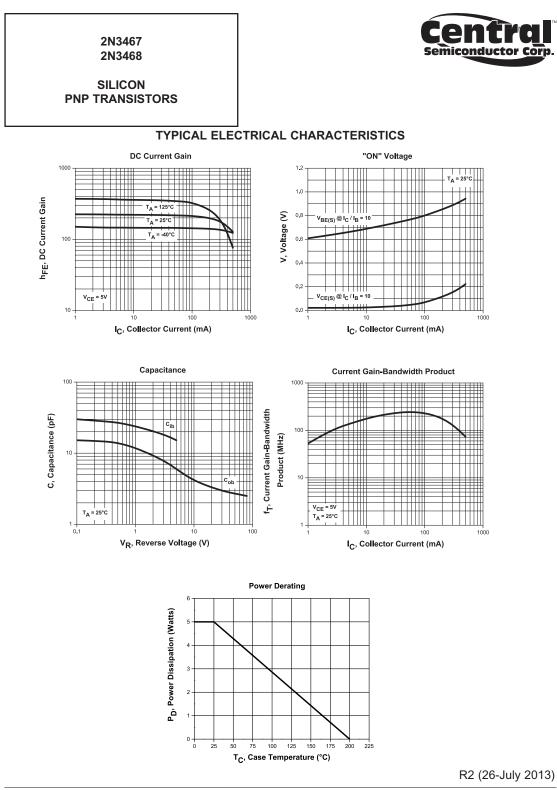
1) Emitter 2) Base

3) Collector

MARKING: FULL PART NUMBER

R2 (26-July 2013)

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## **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

#### **DESIGNER SUPPORT/SERVICES**

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

- Free quick ship samples (2<sup>nd</sup> 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

· Custom product packing

- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits

Custom bar coding for shipments

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).
- 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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# Product End of Life Notification

PDN01245
8/15/22
2/15/23
8/15/23

Summary: The CP767V wafer process is discontinued and now classified as End of Life (EOL).

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by other manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's ongoing Product Portfolio Management. Any replacement products are noted below. The effective date for placing last purchase orders will be six (6) months from the date of this notice and twelve (12) months from the notice date for final shipments, and minimum order quantities may apply. The last purchase and shipment dates may be extended if inventory is available.

# \* All Plating types (PBFREE,TIN/LEAD) for each item listed are included in this notice.

Central Part Number	Suggested Replacement
CEN1273-1	N/A
CP767V-2N3467-CT	N/A
2N3467	N/A
2N3468	N/A
2N3763	N/A

Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we have no replacement available. If you would like assistance, please visit https://my.centralsemi.com/submit-inquiry?type=ER to submit an online inquiry.

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor Corp. will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.