

SILICON N-CHANNEL JFETS





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## DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N4338 Series devices are silicon N-Channel JFETs mounted in a hermetically sealed metal case designed for low level, low noise amplifier applications.

## MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Gate-Drain Voltage	V <sub>GD</sub>	50	V
Gate-Source Voltage	V <sub>GS</sub>	50	V
Drain-Source Voltage	V <sub>DS</sub>	50	V
Gate Current	IG	50	mA
Power Dissipation	PD	325	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +200	°C

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

		<u>2N</u> 4	1338	<u>2N4</u>	339	<u>2N</u> 4	340	<u>2N</u> 4	341	
SYMBOL	TEST CONDITIONS	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	UNITS
IGSS	$V_{GS}$ =30V, $V_{DS}$ =0	-	0.1	-	0.1	-	0.1	-	0.1	nA
IDSS	V <sub>DS</sub> =15V, V <sub>GS</sub> =0	0.2	0.6	0.5	1.5	1.2	3.6	3.0	9.0	mA
BVGSS	Ι <sub>G</sub> =1.0μΑ	50	-	50	-	50	-	50	-	V
V <sub>GS(OFF)</sub>	V <sub>DS</sub> =15V, I <sub>D</sub> =0.1µA	0.3	1.0	0.6	1.8	1.0	3.0	2.0	6.0	V
Уfs	V <sub>DS</sub> =15V, f=1.0kHz	0.6	1.8	0.8	2.4	1.3	3.0	2.0	4.0	mS
y <sub>os</sub>	V <sub>DS</sub> =15V, f=1.0kHz	-	5.0	-	15	-	30	-	60	μS
C <sub>iss</sub>	V <sub>DS</sub> =15V, f=1.0MHz	-	6.0	-	6.0	-	6.0	-	6.0	pF
C <sub>rss</sub>	V <sub>DS</sub> =15V, f=1.0MHz	-	2.0	-	2.0	-	2.0	-	2.0	pF
NF	V <sub>DS</sub> =15V, f=1.0kHz, R <sub>G</sub> =1.0MΩ	-	1.0	-	1.0	-	1.0	-	1.0	dB

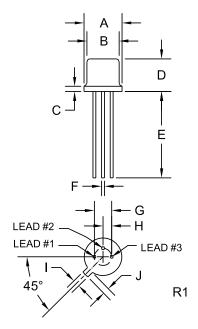
R1 (3-August 2016)



2N4338 2N4340 2N4339 2N4341

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# TO-18 CASE - MECHANICAL OUTLINE



LEAD CODE: 1) Source 2) Drain 3) Gate

MARKING: FULL PART NUMBER

DIMENSIONS					
	INCHES		MILLIMETER		
SYMBOL	MIN	MAX	MIN	MAX	
A (DIA)	0.209	0.230	5.31	5.84	
B (DIA)	0.178	0.195	4.52	4.95	
С	-	0.030	-	0.76	
D	0.170	0.210	4.32	5.33	
E	0.500	-	12.70	-	
F (DIA)	0.016	0.019	0.41	0.48	
G (DIA)	0.100		2.54		
Н	0.050		1.27		
I	0.036	0.046	0.91	1.17	
J	0.028	0.048	0.71	1.22	
			TO-18 (F	REV: R1)	

R1 (3-August 2016)

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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

#### **Corporate Headquarters & Customer Support Team**

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Product End of Life Notification

PDN ID:	PDN01101 Rev:001
Notification Date:	6/08/21
Last Buy Date:	7/18/19
Last Shipment Date	1/18/20

Summary: The Junction Field Effect Transistors (JFETs) listed below were discontinued on January 18, 2019, and are currently classified as End of Life (EOL). Rev:001 of PDN#01101, June 8, 2021, is being issued to remove part numbers 2N2608, 2N4340 and PN5033 from the PDN to address market demand; 2N2608, 2N4340 and PN5033 are now active devices.

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 Management Process. 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
BF244B	N/A
BF244C	N/A
BF246A	N/A
BSV79	N/A
BSV80	N/A
CMPFJ310 BK	N/A
CMPFJ310 TR	N/A
PN4302	N/A
2N3820	N/A
2N3955	N/A
2N4341	N/A
2N5115	N/A
2N5953	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. Please email your requests to engineering@centralsemi.com.

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.