2N5484 2N5485 2N5486

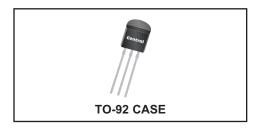
SILICON N-CHANNEL JFET



www.centralsemi.com

The CENTRAL SEMICONDUCTOR 2N5484, 2N5485, and 2N5486 are silicon N-Channel JFETs designed for RF amplifier and mixer applications. These devices will operate well in the VHF/UHF frequency range.

MARKING: FULL PART NUMBER



MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Drain-Gate Voltage	$V_{DG}$	25	V
Gate-Source Voltage	$V_{GS}$	25	V
Drain Current	$I_{D}$	30	mA
Continuous Gate Current	$I_{G}$	10	mA
Power Dissipation	$P_{D}$	310	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C

 $\textbf{ELECTRICAL CHARACTERISTICS:} \ (T_{\mbox{\scriptsize A}} = 25^{\circ}\mbox{C unless otherwise noted})$ 

		2N:	<u>5484</u>	2N5	485	2N5	5486	
SYMBOL	TEST CONDITIONS	MIN	MAX	MIN	MAX	MIN	MAX	UNITS
IGSS	V <sub>GS</sub> =20V	-	1.0	-	1.0	-	1.0	nA
I <sub>GSS</sub>	$V_{GS}$ =20V, $T_A$ =100°C	-	0.2	-	0.2	-	0.2	μΑ
IDSS	V <sub>DS</sub> =15V	1.0	5.0	4.0	10	8.0	20	mA
$BV_{GSS}$	I <sub>G</sub> =1.0μA	25	-	25	-	25	-	V
V <sub>GS(off)</sub>	V <sub>DS</sub> =15V, I <sub>D</sub> =10nA	0.3	3.0	0.5	4.0	2.0	6.0	V
y <sub>fs</sub>	$V_{DS}$ =15V, $V_{GS}$ =0, f=1.0kHz	3.0	6.0	3.5	7.0	4.0	8.0	mS
$ y_{os} $	$V_{DS}$ =15V, $V_{GS}$ =0, f=1.0kHz	-	50	-	60	-	75	μS
C <sub>iss</sub>	$V_{DS}$ =15V, $V_{GS}$ =0, f=1.0MHz	-	5.0	-	5.0	-	5.0	pF
Coss	$V_{DS}$ =15V, $V_{GS}$ =0, f=1.0MHz	-	2.0	-	2.0	-	2.0	pF
C <sub>rss</sub>	$V_{DS}$ =15V, $V_{GS}$ =0, f=1.0MHz	-	1.0	-	1.0	-	1.0	pF
R <sub>e(yis)</sub>	$V_{DS}$ =15V, $V_{GS}$ =0, f=100MHz	-	100	-	-	-	-	μS
R <sub>e(yis)</sub>	$V_{DS}$ =15V, $V_{GS}$ =0, f=400MHz	-	-	-	1.0	-	1.0	mS
R <sub>e(yos)</sub>	$V_{DS}$ =15V, $V_{GS}$ =0, f=100MHz	-	75	-	-	-	-	μS
R <sub>e(yos)</sub>	$V_{DS}$ =15V, $V_{GS}$ =0, f=400MHz	-	-	-	100	-	100	μS
R <sub>e(yfs)</sub>	$V_{DS}$ =15V, $V_{GS}$ =0, f=100MHz	2.5	-	-	-	-	-	mS
R <sub>e(yfs)</sub>	$V_{DS}$ =15V, $V_{GS}$ =0, f=400MHz	-	-	3.0	-	3.5	-	mS

2N5484 2N5485 2N5486

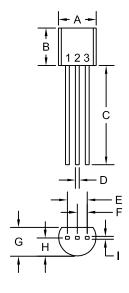
## SILICON N-CHANNEL JFET



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

	<u>2N</u>	5484	<u>2N5</u>	<u>485</u>	2N5	<u> 486</u>	
TEST CONDITIONS	MIN	MAX	MIN	MAX	MIN	MAX	UNITS
$V_{DS}$ =15V, $V_{GS}$ =0, $R_{G}$ =1M $\Omega$ , f=1.0KHz	-	2.5	-	2.5	-	2.5	dB
$V_{DS}$ =15V, $I_D$ =1.0mA, $R_G$ =1K $\Omega$ , f=100MH	lz -	3.0	-	-	-	-	dB
$V_{DS}$ =15V, $I_{D}$ =1.0mA, $R_{G}$ =1K $\Omega$ , f=200MF	lz -	4.0TYP	-	-	-	-	dB
$V_{DS}$ =15V, $I_{D}$ =4.0mA, $R_{G}$ =1K $\Omega$ , f=100MF	lz -	-	-	2.0	-	2.0	dB
$V_{DS}$ =15V, $I_{D}$ =4.0mA, $R_{G}$ =1K $\Omega$ , f=400MF	lz -	-	-	4.0	-	4.0	dB
$V_{DS}$ =15V, $I_{D}$ =1.0mA, f=100MHz	16	25	-	-	-	-	dB
$V_{DS}$ =15V, $I_D$ =1.0mA, f=200MHz	-	14 TYP	-	-	-	-	dB
$V_{DS}$ =15V, $I_{D}$ =4.0mA, f=100MHz	-	-	18	30	18	30	dB
$V_{DS}$ =15V, $I_D$ =4.0mA, f=400MHz	-	-	10	20	10	20	dB
	$\begin{split} &V_{DS}\text{=}15\text{V}, V_{GS}\text{=}0, R_{G}\text{=}1\text{M}\Omega, \text{f}\text{=}1.0\text{KHz} \\ &V_{DS}\text{=}15\text{V}, I_{D}\text{=}1.0\text{mA}, R_{G}\text{=}1\text{K}\Omega, \text{f}\text{=}100\text{MHz} \\ &V_{DS}\text{=}15\text{V}, I_{D}\text{=}1.0\text{mA}, R_{G}\text{=}1\text{K}\Omega, \text{f}\text{=}200\text{MHz} \\ &V_{DS}\text{=}15\text{V}, I_{D}\text{=}4.0\text{mA}, R_{G}\text{=}1\text{K}\Omega, \text{f}\text{=}100\text{MHz} \\ &V_{DS}\text{=}15\text{V}, I_{D}\text{=}4.0\text{mA}, R_{G}\text{=}1\text{K}\Omega, \text{f}\text{=}400\text{MHz} \\ &V_{DS}\text{=}15\text{V}, I_{D}\text{=}1.0\text{mA}, \text{f}\text{=}100\text{MHz} \\ &V_{DS}\text{=}15\text{V}, I_{D}\text{=}4.0\text{mA}, \text{f}\text{=}200\text{MHz} \\ &V_{DS}\text{=}15\text{V}, I_{D}\text{=}4.0\text{mA}, \text{f}\text{=}100\text{MHz} \end{split}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	TEST CONDITIONS MIN MAX MIN MAX $V_{DS}$ =15V, $V_{GS}$ =0, $R_{G}$ =1MΩ, f=1.0KHz - 2.5 - 2.5 $V_{DS}$ =15V, $I_{D}$ =1.0mA, $R_{G}$ =1KΩ, f=100MHz - 3.0 - - $V_{DS}$ =15V, $I_{D}$ =1.0mA, $R_{G}$ =1KΩ, f=200MHz - 4.0TYP - - $V_{DS}$ =15V, $I_{D}$ =4.0mA, $R_{G}$ =1KΩ, f=400MHz - - - 4.0 $V_{DS}$ =15V, $I_{D}$ =1.0mA, f=100MHz 16 25 - - $V_{DS}$ =15V, $I_{D}$ =1.0mA, f=200MHz - 14 TYP - - $V_{DS}$ =15V, $I_{D}$ =4.0mA, f=100MHz - - 18 30	TEST CONDITIONS MIN MAX MIN AD $V_DS=15V$ , $I_D=1.0mA$ , $R_G=1K\Omega$ , $F$	TEST CONDITIONS MIN MAX MIN MAX MIN MAX $V_{DS}$ =15V, $V_{GS}$ =0, $R_G$ =1MΩ, f=1.0KHz - 2.5 - 2.5 - 2.5 $V_{DS}$ =15V, $I_D$ =1.0mA, $R_G$ =1KΩ, f=100MHz - 3.0 - - - - - $V_{DS}$ =15V, $I_D$ =1.0mA, $R_G$ =1KΩ, f=200MHz - - - 2.0 - 2.0 $V_{DS}$ =15V, $I_D$ =4.0mA, $R_G$ =1KΩ, f=400MHz - - - 4.0 - 4.0 $V_{DS}$ =15V, $I_D$ =1.0mA, f=100MHz 16 25 - - - $V_{DS}$ =15V, $I_D$ =1.0mA, f=200MHz - 14 TYP - - - $V_{DS}$ =15V, $I_D$ =4.0mA, f=100MHz - - 18 30 18 30

# **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	
Е	0.1	0.100		54	
F	0.050		1.27		
G	0.125	0.165	3.18	4.19	
Н	0.080	0.105	2.03	2.67	
I 0.015		0.38			

TO-92 (REV: R1)

# LEAD CODE:

- 1) Drain
- 2) Source
- 3) Gate

R1

# MARKING:

**FULL PART NUMBER** 

### **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 (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
- 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

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Support Team Fax: (631) 435-3388

www.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

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# Product End of Life Notification

PDN ID:	PDN01067
Notification Date:	10/03/17
Last Buy Date:	N/A
Last Shipment Date	N/A

Please be advised that Central Semiconductor must immediately discontinue the product(s) listed in the attached PDN notice. We are unable to accept any further orders for these products **unless** we have available inventory on hand.

You may have purchased one or more of the products listed. Please do not hesitate to contact your local Central Semiconductor sales representative with any questions or needs you may have. Central regrets any inconvenience this may cause.

Sincerely,

Central Semiconductor Corp.

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.

CCC785 REV 002



# Product End of Life Notification

PDN ID:	PDN01067
Notification Date:	10/03/17
Last Buy Date:	N/A
Last Shipment Date	N/A

Summary: The 2N5485 silicon N-Channel JFET is discontinued and is 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 various 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 Product Management Process. Any replacement product will be noted below. The effective date for placing the last purchase order will be six(6) months from the date of this notice and twelve(12) months from the notice date for final shipments; this may be extended if inventory is available.

Central Part Number	Replacement	
2N5485	2N5486	Н

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.

CCC785 REV 002

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**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Central Semiconductor: 2N5485 2N5486