

2N5484
2N5485
2N5486

**SILICON
N-CHANNEL JFET**



TO-92 CASE



www.centrasemi.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: ($T_A=25^\circ\text{C}$)

Drain-Gate Voltage
Gate-Source Voltage
Drain Current
Continuous Gate Current
Power Dissipation
Operating and Storage Junction Temperature

SYMBOL		UNITS
V_{DG}	25	V
V_{GS}	25	V
I_D	30	mA
I_G	10	mA
P_D	310	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	2N5484		2N5485		2N5486		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	
I_{GSS}	$V_{GS}=20\text{V}$	-	1.0	-	1.0	-	1.0	nA
I_{GSS}	$V_{GS}=20\text{V}, T_A=100^\circ\text{C}$	-	0.2	-	0.2	-	0.2	μA
I_{DSS}	$V_{DS}=15\text{V}$	1.0	5.0	4.0	10	8.0	20	mA
BV_{GSS}	$I_G=1.0\mu\text{A}$	25	-	25	-	25	-	V
$V_{GS(off)}$	$V_{DS}=15\text{V}, I_D=10\text{nA}$	0.3	3.0	0.5	4.0	2.0	6.0	V
$ y_{fs} $	$V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{kHz}$	3.0	6.0	3.5	7.0	4.0	8.0	mS
$ y_{os} $	$V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{kHz}$	-	50	-	60	-	75	μS
C_{iss}	$V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{MHz}$	-	5.0	-	5.0	-	5.0	pF
C_{oss}	$V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{MHz}$	-	2.0	-	2.0	-	2.0	pF
C_{rss}	$V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{MHz}$	-	1.0	-	1.0	-	1.0	pF
$R_{e(yis)}$	$V_{DS}=15\text{V}, V_{GS}=0, f=100\text{MHz}$	-	100	-	-	-	-	μS
$R_{e(yis)}$	$V_{DS}=15\text{V}, V_{GS}=0, f=400\text{MHz}$	-	-	-	1.0	-	1.0	mS
$R_{e(yos)}$	$V_{DS}=15\text{V}, V_{GS}=0, f=100\text{MHz}$	-	75	-	-	-	-	μS
$R_{e(yos)}$	$V_{DS}=15\text{V}, V_{GS}=0, f=400\text{MHz}$	-	-	-	100	-	100	μS
$R_{e(yfs)}$	$V_{DS}=15\text{V}, V_{GS}=0, f=100\text{MHz}$	2.5	-	-	-	-	-	mS
$R_{e(yfs)}$	$V_{DS}=15\text{V}, V_{GS}=0, f=400\text{MHz}$	-	-	3.0	-	3.5	-	mS

R1 (2-May 2014)

2N5484
2N5485
2N5486

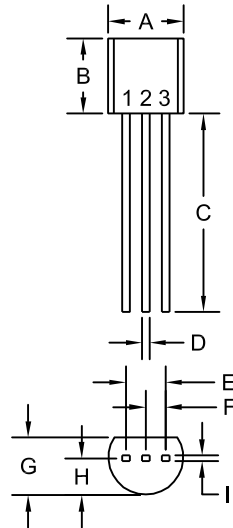
SILICON
N-CHANNEL JFET



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

SYMBOL	TEST CONDITIONS	2N5484		2N5485		2N5486		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	
NF	$V_{DS}=15\text{V}$, $V_{GS}=0$, $R_G=1\text{M}\Omega$, $f=1.0\text{KHz}$	-	2.5	-	2.5	-	2.5	dB
NF	$V_{DS}=15\text{V}$, $I_D=1.0\text{mA}$, $R_G=1\text{K}\Omega$, $f=100\text{MHz}$	-	3.0	-	-	-	-	dB
NF	$V_{DS}=15\text{V}$, $I_D=1.0\text{mA}$, $R_G=1\text{K}\Omega$, $f=200\text{MHz}$	-	4.0 TYP	-	-	-	-	dB
NF	$V_{DS}=15\text{V}$, $I_D=4.0\text{mA}$, $R_G=1\text{K}\Omega$, $f=100\text{MHz}$	-	-	-	2.0	-	2.0	dB
NF	$V_{DS}=15\text{V}$, $I_D=4.0\text{mA}$, $R_G=1\text{K}\Omega$, $f=400\text{MHz}$	-	-	-	4.0	-	4.0	dB
G_{PS}	$V_{DS}=15\text{V}$, $I_D=1.0\text{mA}$, $f=100\text{MHz}$	16	25	-	-	-	-	dB
G_{PS}	$V_{DS}=15\text{V}$, $I_D=1.0\text{mA}$, $f=200\text{MHz}$	-	14 TYP	-	-	-	-	dB
G_{PS}	$V_{DS}=15\text{V}$, $I_D=4.0\text{mA}$, $f=100\text{MHz}$	-	-	18	30	18	30	dB
G_{PS}	$V_{DS}=15\text{V}$, $I_D=4.0\text{mA}$, $f=400\text{MHz}$	-	-	10	20	10	20	dB

TO-92 CASE - MECHANICAL OUTLINE



R1

SYMBOL	DIMENSIONS			
	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
I	0.015		0.38	

TO-92 (REV: R1)

LEAD CODE:

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

MARKING:

FULL PART NUMBER

R1 (2-May 2014)

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

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