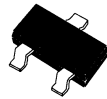


CMPF5484
CMPF5485
CMPF5486

N-CHANNEL JFET



SOT-23 CASE

CentralTM
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPF5484 Series types are surface mount, N-Channel JFET's designed for RF amplifier and mixer applications. These devices will operate well in the VHF/UHF frequency range.

MAXIMUM RATINGS ($T_A=25^\circ\text{C}$ unless otherwise noted)

	SYMBOL		UNITS
Gate-Drain Voltage	V_{GD}	25	V
Gate-Source Voltage	V_{GS}	25	V
Drain Current	I_D	30	mA
Gate Current	I_G	10	mA
Power Dissipation	P_D	350	mW
Operating and Storage			
Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
Thermal Resistance	Θ_{JA}	357	$^\circ\text{C}/\text{W}$

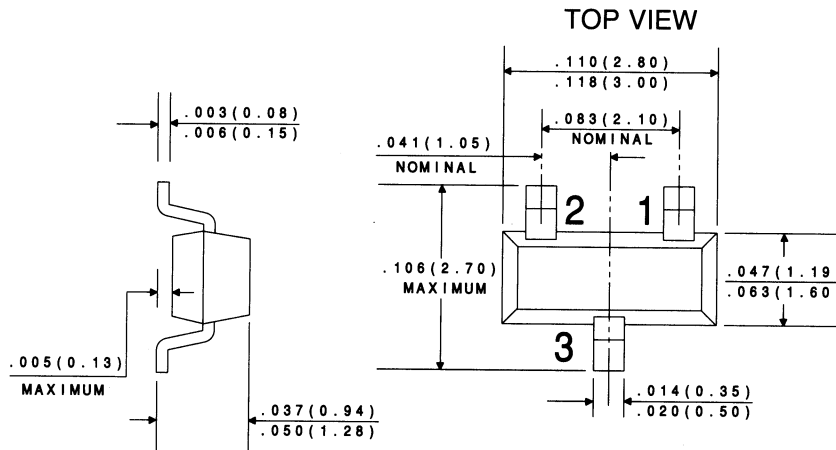
ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	CMPF5484		CMPF5485		CMPF5486		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}	$V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{kHz}$	3000	6000	3500	7000	4000	8000	μmhos
Y_{os}	$V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{kHz}$		50		60		75	μmhos
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		-		-	μmhos
$R_{e(yis)}$	$V_{DS}=15\text{V}, V_{GS}=0, f=400\text{MHz}$		-		1000		1000	μmhos
$R_{e(yos)}$	$V_{DS}=15\text{V}, V_{GS}=0, f=100\text{MHz}$		75		-		-	μmhos
$R_{e(yos)}$	$V_{DS}=15\text{V}, V_{GS}=0, f=400\text{MHz}$		-		100		100	μmhos

ELECTRICAL CHARACTERISTICS (cont'd.) ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	CMPF5484		CMPF5485		CMPF5486		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	
$R_{e(yfs)}$	$V_{DS}=15\text{V}, V_{GS}=0, f=100\text{MHz}$	2500	-	-	-	-	-	μhos
$R_{e(yfs)}$	$V_{DS}=15\text{V}, V_{GS}=0, f=400\text{MHz}$	-	-	3000	-	3500	-	μhos
N_F	$V_{DS}=15\text{V}, V_{GS}=0, R_G=1\text{M}\Omega, f=1.0\text{kHz}$	-	2.5	-	2.5	-	2.5	dB
N_F	$V_{DS}=15\text{V}, I_D=1.0\text{mA}, R_G=1\text{K}\Omega, f=100\text{MHz}$	-	3.0	-	-	-	-	dB
N_F	$V_{DS}=15\text{V}, I_D=1.0\text{mA}, R_G=1\text{K}\Omega, f=200\text{MHz}$	-	4.0 TYP	-	-	-	-	dB
N_F	$V_{DS}=15\text{V}, I_D=4.0\text{mA}, R_G=1\text{K}\Omega, f=100\text{MHz}$	-	-	-	2.0	-	2.0	dB
N_F	$V_{DS}=15\text{V}, I_D=4.0\text{mA}, R_G=1\text{K}\Omega, f=400\text{MHz}$	-	-	-	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

All Dimensions in mm.



DATA SHEET

LEAD CODE:

- 1) SOURCE
- 2) DRAIN
- 3) GATE

MARKING CODE:

- CMPF5484 - 6B
- CMPF5485 - 6B1
- CMPF5486 - 6H

R2