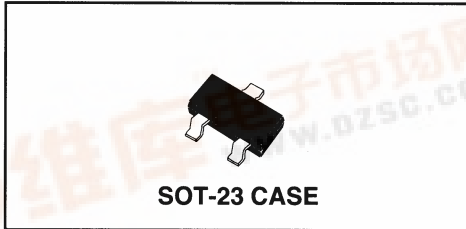


CMPF5484
CMPF5485
CMPF5486

N-CHANNEL JFET



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°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	°C
Thermal Resistance	θ _{JA}	357	°C/W

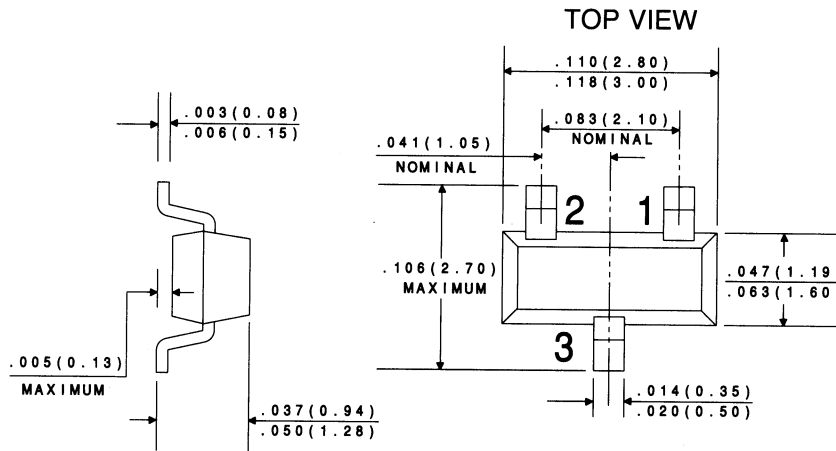
ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	CMPF5484		CMPF5485		CMPF5486		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	
I _{GSS}	V _{GS} =20V		1.0		1.0		1.0	nA
I _{GSS}	V _{GS} =20V, T _A =100°C		0.2		0.2		0.2	μA
I _{DSS}	V _{DS} =15V	1.0	5.0	4.0	10	8.0	20	mA
BV _{GS}	I _G =1.0μA	25		25		25		V
V _{GS(off)}	V _{DS} =15V, I _D =10nA	0.3	3.0	0.5	4.0	2.0	6.0	V
Y _{fs}	V _{DS} =15V, V _{GS} =0, f=1.0kHz	3000	6000	3500	7000	4000	8000	μmhos
Y _{os}	V _{DS} =15V, V _{GS} =0, f=1.0kHz		50		60		75	μmhos
C _{iss}	V _{DS} =15V, V _{GS} =0, f=1.0MHz		5.0		5.0		5.0	pF
C _{oss}	V _{DS} =15V, V _{GS} =0, f=1.0MHz		2.0		2.0		2.0	pF
C _{rss}	V _{DS} =15V, V _{GS} =0, f=1.0MHz		1.0		1.0		1.0	pF
R _{e(yis)}	V _{DS} =15V, V _{GS} =0, f=100MHz		100		-		-	μmhos
R _{e(yis)}	V _{DS} =15V, V _{GS} =0, f=400MHz		-		1000		1000	μmhos
R _{e(yos)}	V _{DS} =15V, V _{GS} =0, f=100MHz		75		-		-	μmhos
R _{e(yos)}	V _{DS} =15V, V _{GS} =0, f=400MHz		-		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	
$R_e(\text{yfs})$	$V_{DS}=15\text{V}, V_{GS}=0, f=100\text{MHz}$	2500	-	-	-	-	-	μhos
$R_e(\text{yfs})$	$V_{DS}=15\text{V}, V_{GS}=0, f=400\text{MHz}$	-	-	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.



LEAD CODE:

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

MARKING CODE:

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

DATA SHEET

R2