

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

2N5460

2N5461

2N5462

P-CHANNEL JFET

JEDEC TO-92 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N5460 Series types are Silicon P Channel Junction Field Effect Transistors designed for low level amplifier applications.

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

	SYMBOL		UNIT
Drain-Gate Voltage	V_{DG}	40	V
Reverse Gate Source Voltage	V_{GSR}	40	V
Gate Current	I_G	10	mA
Power Dissipation	P_D	310	mW
Operating and Storage			
Junction Temperature	T_J, T_{stg}	-65 TO +150	$^\circ\text{C}$

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

SYMBOL	TEST CONDITIONS	2N5460		2N5461		2N5462		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	
I_{GSS}	$V_{GS}=20\text{V}$		5.0		5.0		5.0	nA
I_{GSS}	$V_{GS}=20\text{V}, T_A=100^\circ\text{C}$		1.0		1.0		1.0	μA
I_{DSS}	$V_{DS}=15\text{V}, f=1.0\text{kHz}$	1.0	5.0	2.0	9.0	4.0	16	mA
BV_{GSS}	$I_G=10\mu\text{A}$	40		40		40		V
V_{GS}	$V_{DS}=15\text{V}, I_D=0.1\text{mA}$	0.5	4.0	-	-	-	-	V
V_{GS}	$V_{DS}=15\text{V}, I_D=0.2\text{mA}$	-	-	0.8	4.5	-	-	V
V_{GS}	$V_{DS}=15\text{V}, I_D=0.4\text{mA}$	-	-	-	-	1.5	6.0	V
$V_{GS}(\text{OFF})$	$V_{DS}=15\text{V}, I_D=1.0\mu\text{A}$	0.75	6.0	1.0	7.5	1.8	9.0	V
I_{Yfs1}	$V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{kHz}$	1000	4000	1500	5000	2000	6000	μhos
I_{Yos1}	$V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{kHz}$		75		75		75	μhos
C_{iss}	$V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{MHz}$		7.0		7.0		7.0	pF
C_{rss}	$V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{MHz}$		2.0		2.0		2.0	pF
NF	$V_{DS}=15\text{V}, V_{GS}=0, R_G=1.0\text{M}\Omega, f=100\text{Hz}, BW=1.0\text{Hz}$		2.5		2.5		2.5	dB
e_n	$V_{DS}=15\text{V}, V_{GS}=0, f=100\text{Hz}, BW=1.0\text{Hz}$		115		115		115	$\text{nV}/\sqrt{\text{Hz}}$