

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

2N5564
2N5565
2N5566

MATCHED DUAL
N-CHANNEL JFET

JEDEC TO-71 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N5564 series types are silicon monolithic dual N-Channel Junction Field Effect Transistors designed for wide band, low noise, amplifier input stages.

MAXIMUM RATINGS (T_A = 25°C)

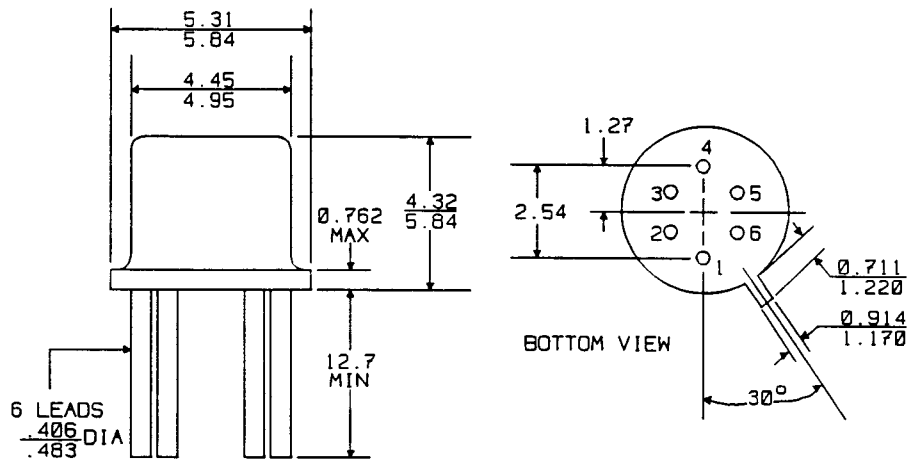
	SYMBOL		UNITS
Gate-Gate Voltage	V _{GG}	80	V
Drain-Gate Voltage	V _{DG}	40	V
Source-Gate Voltage	V _{SG}	40	V
Gate Current	I _G	50	mA
Power Dissipation (Each Transistor)	P _D	325	mW
Power Dissipation (Total Package)	P _D	650	mW
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +200	°C

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

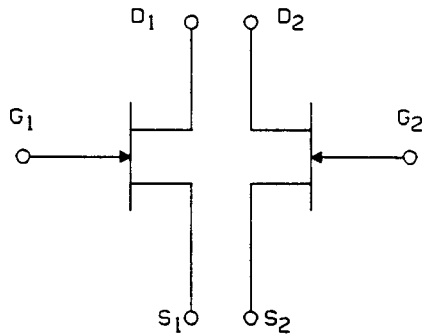
SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I _{GSS}	V _{GS} = 20V		100	pA
I _{GSS}	V _{GS} = 20V, T _A = 150°C		200	nA
I _{DSS}	V _{DS} = 15V	5.0	30	mA
BV _{GSS}	I _G = 1.0μA	40		V
V _{GS(OFF)}	V _{DS} = 15V, I _D = 1.0nA	0.5	3.0	V
V _{GS(f)}	V _{DS} = 0, I _G = 2.0mA		1.0	V
r _{DS}	I _D = 1.0mA		100	Ω
g _{fs}	V _{DG} = 15V, I _D = 2.0mA, f = 1kHz	7500	12500	μmho
g _{fs}	V _{DG} = 15V, I _D = 2.0mA, f = 100MHz	7000		μmho
g _{os}	V _{DG} = 15V, I _D = 2.0mA, f = 1kHz		45	μmho
C _{rSS}	V _{DG} = 15V, I _D = 2.0mA, f = 1MHz		3.0	pF
C _{iSS}	V _{DG} = 15V, I _D = 2.0mA, f = 1MHz		12	pF
NF	V _{DG} = 15V, I _D = 2.0mA, R _G = 1.0MΩ, f = 10Hz		1.0	dB
\bar{e}_n	V _{DG} = 15V, I _D = 2.0mA, f = 10Hz		50	nV/√Hz

ELECTRICAL CHARACTERISTICS (continued)

SYMBOL	TEST CONDITIONS	2N5564		2N5565		2N5566		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	
I_{DSS1}/I_{DSS2}	$V_{DS} = 15V, V_{GS} = 0$	0.95	1.0	0.95	1.0	0.95	1.0	
$ V_{GS1} - V_{GS2} $	$V_{DS} = 15V, I_D = 2.0mA$		5.0		10		20	mV
$\Delta V_{GS1} - V_{GS2} /\Delta T$	$V_{DS} = 15V, I_D = 2.0mA, T_A = -55 \text{ TO } 25^\circ C$		10		25		50	$\mu V/^\circ C$
$\Delta V_{GS1} - V_{GS2} /\Delta T$	$V_{DS} = 15V, I_D = 2.0mA, T_A = 25 \text{ TO } 125^\circ C$		10		25		50	$\mu V/^\circ C$
g_{fs1}/g_{fs2}	$V_{DS} = 15V, I_D = 2.0mA, f = 1.0kHz$	0.95	1.0	0.90	1.0	0.90	1.0	



All Dimensions in mm.



LEAD CODE:

- 1) SOURCE 1
- 2) DRAIN 1
- 3) GATE 1
- 4) SOURCE 2
- 5) DRAIN 2
- 6) GATE 2