p-channel JFET

Siliconix

designed for . . .

- **Amplifiers**
- **Analog Switches**

BENEFITS

- **Low Cost**
- **Automated Insertion Package**
- **Low Capacitance**

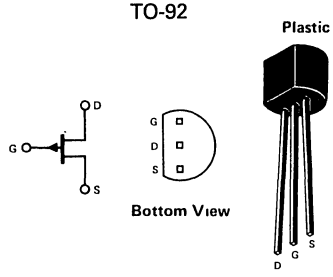
ABSOLUTE MAXIMUM RATINGS

T_A = 25°C unless otherwise noted

Drain-Gate or Source-Gate Voltage
- 2N5460 - 2N5462 ..... 40V
- 2N5463 - 2N5465 ..... 60V

Gate Current .....10 mA
Storage Temperature Range ..... −65°C to +200°C
Operating Temperature Range..... −55°C to +150°C
Lead Temperature (Soldering, 10 sec.) ..... +300°C
Power Dissipation ..... 310 mW
- Derate Above 25°C ..... 2.8 mW/°C

PIN CONFIGURATION
TO-92



ELECTRICAL CHARACTERISTICS (25°C unless otherwise noted)

Parameter				Min	Typ	Max	Units	Test Conditions	
BV_{GSS}	Gate-Source Breakdown Voltage		2N5460, 2N5461, 2N5462	40			V	I_G = 10 μAdc, V_{DS} = 0	
			2N5463, 2N5464, 2N5465	60					
$V_{GS(off)}$	Gate-Source Cutoff Voltage		2N5460, 2N5463	0.75		6.0	V	V_{DS} = 15 Vdc, I_D = 1.0 μAdc	
			2N5461, 2N5464	1.0		7.5			
			2N5462, 2N5465	1.8		9.0			
I_{GSSR}	Gate-Reverse Current		2N5460, 2N5461, 2N5462			5.0	nA	V_{DS} = 0	V_{GS} = 20V
			2N5463, 2N5464, 2N5465			5 0			V_{GS} = 30V
		T_A = 100°C	2N5460, 2N5461, 2N5462			1 0	μA		V_{GS} = 20V
			2N5463, 2N5464, 2N5465			1.0			V_{GS} = 30V
I_{DSS}	Zero-Gate Voltage Drain Current		2N5460, 2N5463	−1 0		−5.0	mA	V_{DS} = −15V	V_{GS} = 0
			2N5461, 2N5464	−2.0		−9 0			
			2N5462, 2N5465	−4.0		−16			
V_{GS}	Gate-Source Voltage		2N5460, 2N5463	0 5		4 0	V		I_D = 0 1 mA
			2N5461, 2N5464	0 8		4.5			I_D = −0.2 mA
			2N5462, 2N5465	1 5		6.0			I_D = −0 4 mA
g_{fs}	Forward Transadmittance		2N5460, 2N5463	1000		4000	μmho	V_{DS} = −15V V_{GS} = 0V	f = 1 0 kHz
			2N5461, 2N5464	1500		5000			
			2N5462, 2N5465	2000		6000			
g_{os}	Output Admittance					75	μmho		
C_{iss}	Input Capacitance				5.0	7	pF		
C_{oss}	Reverse Transfer Capacitance				1.0	2.0	pF		
NF	Common-Source Noise Figure				1.0	2.5	dB		f = 100 Hz BW = 1 0 Hz R_G = 1 0 MΩ ($\bar{e}_n$ only)
$\bar{e}_n$	Equivalent Short-Circuit Input Noise Voltage				60	115	$\frac{nV}{\sqrt{Hz}}$		

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