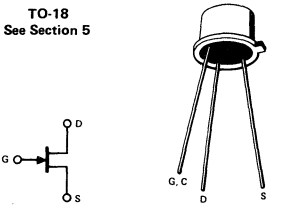
n-channel JFETs *designed for . . .*

Performance Curves NP
See Section 4

■ Small-Signal Low Power Applications

TO-18
See Section 5



*ABSOLUTE MAXIMUM RATINGS (25°C)

Gate-Drain or Gate-Source Voltage (Note 1) . . . . –40 V
Gate Current . . . . . 10 mA
Total Device Dissipation at (or below) 25°C
Free-Air Temperature (Note 2) . . . . . 300 mW
Storage Temperature Range . . . . . –65 to +175°C
Maximum Operating Temperature . . . . . 150°C

*ELECTRICAL CHARACTERISTICS (25°C unless otherwise noted)

		Characteristic		2N3368 Min	2N3368 Max	2N3369 Min	2N3369 Max	2N3370 Min	2N3370 Max	Unit	Test Conditions	
1	STATIC	I_{GSS}	Gate Reverse Current		-5		-5		-5	nA	V_{GS} = -30 V, V_{DS} = 0	
2					-1.5		-1.5		-1.5	μA		100°C
3		BV_{GSS}	Gate-Source Breakdown Voltage	-40		-40		-40		V	I_G = -1 μA, V_{DS} = 0	
4		$V_{GS(off)}$	Gate-Source Cutoff Voltage		-11.5		-6.5		-3.2		V_{DS} = 20 V, I_D = 1 μA	
5		$I_{D(off)}$	Drain Cutoff Current		5 (-12.0)		5 (-7.0)		5 (-3.5)	nA (V)	V_{DS} = 20 V, V_{GS} = ( )	
6		I_{DSS}	Saturation Drain Current	2.0	12.0	0.5	2.5	0.1	0.6	mA	V_{DS} = 30 V (Note 3), V_{GS} = 0	
7	DYNAMIC	g_{fs}	Common-Source Forward Transconductance	1000	4000	600	2500	300	2500	μmho	V_{DS} = 30 V (Note 3), V_{GS} = 0	f = 1 kHz
8		g_{oss}	Common-Source Output Conductance		80		30		15		V_{DS} = 30 V, V_{GS} = 0	f = 1 MHz
9		C_{oss}	Common-Source Output Capacitance		3		3		3	pF		
10		C_{iss}	Common-Source Input Capacitance		20		20		20		V_{DS} = 8 V, V_{GS} = 0	

*JEDEC registered data. **NP**

NOTES:
1. Due to symmetrical geometry, these units may be operated with source and drain leads interchanged.
2. Derate linearly to 150°C free-air temperature at rate of 2.1 mW/°C.
3. To minimize heating on high I_{DSS} units, this parameter is measured during a 2 ms interval 100 ms after power is applied. **(Not a JEDEC condition.)**