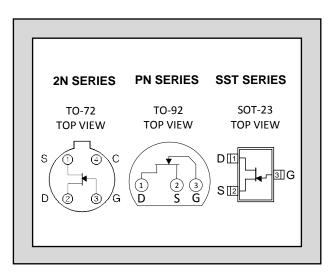
# LINEAR SYSTEMS

## Improved Standard Products<sup>®</sup>

FEATURES							
LOW POWER	(2N4117A)						
MINIMUM CIRCUIT LOADING IGSS<1 pA (2N4117A S							
ABSOLUTE MAXIMUM RATINGS (NOTE 3)							
@ 25°C (unless otherwise noted)							
Gate-Source or Gate-Drain Volta	-40V						
Gate-Current	50mA						
Total Device Dissipation							
(Derate 2mW/ºC above 25°C)	300mW						
Storage Temperature Range	-55°C to+150°C						
Lead Temperature							
(1/16" from case for 10 seconds)	300°C						

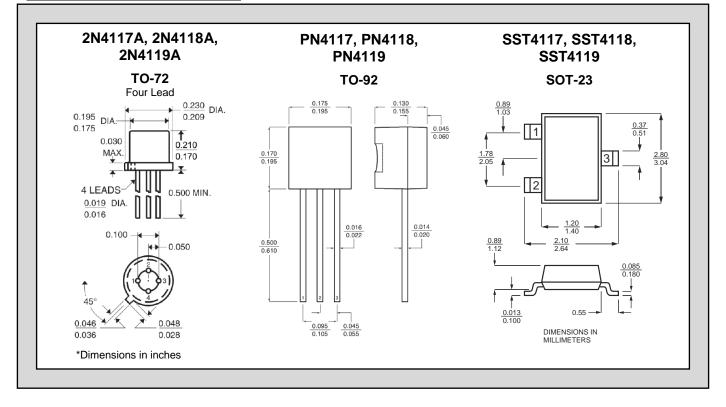
# <u>2N/PN/SST 4117,</u> <u>4118, 4119</u>

### ULTRA-HIGH INPUT IMPEDANCE N-CHANNEL JFET AMPLIFIER



#### ELECTRICAL CHARACTERISTICS @ 25°C (unless otherwise noted)

		4117		4118		4119				
SYMBOL	CHARACTERISTIC	MIN	MAX	MIN	MAX	MIN	MAX	UNITS	CONDITION	IS
BV <sub>GSS</sub>	Gate-Source Breakdown Voltage	-40		-40		-40		V	I <sub>G</sub> =-1µA V <sub>DS</sub> =0	
VGS(off)	Gate-Source Cutoff Voltage	-0.6	-1.8	-1	-3	-2	-6		V <sub>DS</sub> =10V I <sub>D</sub> =1nA	
I <sub>DSS</sub>	Saturation Drain Current (NOTE 2)	0.03	0.60	0.08	0.60	0.20	0.80	mA	V <sub>DS</sub> =10V V <sub>GS</sub> =0	
lgss	Gate Reverse Current 2N4117A, 2N4118A, 2N4119A		-1		-1		-1	pA nA	V <sub>GS</sub> =-20V V <sub>DS</sub> =0	
			-2.5		-2.5		-2.5			150ºC
	PN4117, PN4118, PN4119 SST4117, SST4118, SST4119		-10		-10		-10	pА	VGS =-10V VDS=0	
			-25		-25		-25	nA	VGS =-10V VDS=0	150ºC
<b>g</b> fs	Common-Source Forward Transconductance	70	450	80	650	100	700	μS pF	V <sub>DS</sub> =10V V <sub>GS</sub> =0	f=1kHz
g <sub>os</sub>	Common-Source Output Conductance		3		5		10			
Ciss	Common-Source Input Capacitance (NOTE 4)		3		3		3			f=1MHz
C <sub>rss</sub>	Common-Source Reverse Transfer Capacitance (NOTE 4)	-	1.5		1.5		1.5			1 1 IVII 12



#### NOTES:

- 1. Due to symmetrical geometry, these units may be operated with source and drain leads interchanged.
- 2. This parameter is measured during a 2 ms interval 100 ms after power is applied. (Not a JEDEC condition.)
- 3. Absolute maximum ratings are limiting values above which serviceability may be impaired.
- 4. Not production tested, guaranteed by design.

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