n-channel JFETs *designed for . . .*

■ General Purpose Amplifiers

Performance Curves NP
See Section 4

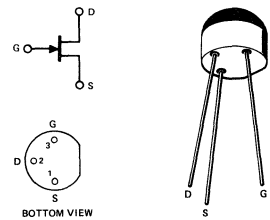
BENEFITS

- High Input Impedance
  I_G = 35 pA Typical
- Good for Low Power Supply Operation
  $V_{GS(off)} < 1.5$ V (E201)

ABSOLUTE MAXIMUM RATINGS (25°C)

Gate-Drain or Gate-Source Voltage (Note 1) ..... -40 V
Gate Current ..... 50 mA
Total Device Dissipation
(25°C Free-Air Temperature)..... 350 mW
Power Derating (to +125°C)..... 3.5 mW/°C
Storage Temperature Range..... -55 to +125°C
Operating Temperature Range ..... -55 to +125°C
Lead Temperature
(1/16" from case for 10 seconds)..... 300°C

TO-106
See Section 5



ELECTRICAL CHARACTERISTICS (25°C unless otherwise noted)

		Characteristic		E201			E202			E203			Unit	Test Conditions	
				Min	Typ	Max	Min	Typ	Max	Min	Typ	Max			
1	STATIC	I_{GSS}	Gate Reverse Current (Note 2)			-100			-100			-100	pA	V_{DS} = 0, V_{GS} = -20 V	
2	STATIC	$V_{GS(off)}$	Gate-Source Cutoff Voltage	-0.3		-1.5	-0.8		-4.0	-2.0		-10.0	V	V_{DS} = 20 V, I_D = 10 nA	
3	STATIC	BV_{GSS}	Gate-Source Breakdown Voltage	-40			-40			-40			V	V_{DS} = 0, I_G = -1 μA	
4	STATIC	I_{DSS}	Saturation Drain Current (Note 3)	0.2		1.0	0.9		4.5	4.0		20	mA	V_{DS} = 20 V, V_{GS} = 0	
5	STATIC	I_G	Gate Current (Note 2)		-35			-35			-35		pA	V_{DG} = 20 V, I_D = $I_{DSS(min)}$	
6	DYNAMIC	g_{fs}	Common-Source Forward Transconductance (Note 3)	500			1,000			1,500			μmho	V_{DS} = 20 V, V_{GS} = 0	f = 1 kHz
7	DYNAMIC	g_{os}	Common-Source Output Conductance		1			3.5			10		μmho		f = 1 kHz
8	DYNAMIC	C_{iss}	Common-Source Input Capacitance		5			5			5		pF		f = 1 MHz
9	DYNAMIC	C_{rss}	Common-Source Reverse Transfer Capacitance		2			2			2		pF		f = 1 MHz
10	DYNAMIC	$\overline{e}_n$	Equivalent Short-Circuit Input Noise Voltage		5			5			5		$\frac{nV}{\sqrt{Hz}}$	V_{DS} = 10 V, V_{GS} = 0	f = 1 kHz

NOTES: **NP**

1. Geometry is symmetrical. Units may be operated with source and drain leads interchanged.
2. Approximately doubles for every 10°C increase in T_A.
3. Pulse test duration - 2 ms.