

# n-channel JFETs designed for . . .



**Performance Curves NP**  
**See Section 4**

## ■ General Purpose Switching

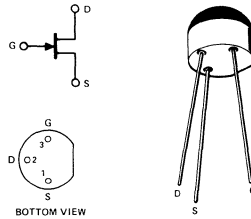
### BENEFITS

- Very Low Leakage

### ABSOLUTE MAXIMUM RATINGS (25°C)

Gate-Drain or Gate-Source Voltage (Note 1)	−25 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		E204			Unit	Test Conditions			
		Min	Typ	Max					
1	S T A T I C	$I_{GSS}$ Gate Reverse Current (Note 2)			−100	pA	$V_{DS} = 0, V_{GS} = -20 V$		
2		$V_{GS(off)}$ Gate-Source Cutoff Voltage	−0.5		−2.0	V	$V_{DS} = 20 V, I_D = 10 nA$		
3		$BV_{GSS}$ Gate-Source Breakdown Voltage	−25				$V_{DS} = 0, I_G = -1 \mu A$		
4		$I_{DSS}$ Saturation Drain Current (Note 3)		1.2			mA	$V_{DS} = 20 V, V_{GS} = 0$	
5		$I_G$ Gate Current (Note 2)			−35		pA	$V_{DG} = 20 V, I_D = 200 \mu A$	
6	D Y N A M I C	$g_{fs}$ Common Source Forward Transconductance (Note 3)		1500		$\mu mho$	$V_{DS} = 20 V, V_{GS} = 0$	$f = 1 kHz$	
7		$g_{os}$ Common-Source Output Conductance		2.5					
8		$C_{iss}$ Common-Source Input Capacitance		5				pF	$f = 1 MHz$
9		$C_{rss}$ Common-Source Reverse Transfer Capacitance		2					
10	$\bar{e}_n$ Equivalent Short-Circuit Input Noise Voltage		10			$\frac{nV}{\sqrt{Hz}}$	$V_{DS} = 10 V, V_{GS} = 0$	$f = 1 kHz$	

**3**

**NOTES:**

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.

NP