

# matched dual n-channel JFETs designed for . . .



## Performance Curves NZF See Section 4

### ■ VHF/UHF Amplifiers

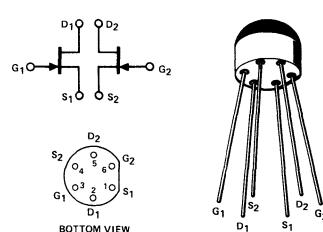
#### BENEFITS

- High Gain  
 $g_{fs} = 4500 \mu\text{mho}$  Minimum
- Dual Version of E300 with Matched Gate-to-Source Voltage

#### ABSOLUTE MAXIMUM RATINGS (25°C)

Gate-To-Gate Voltage	.....	$\pm 50$ V
Gate-Drain or Gate-Source Voltage	.....	-25 V
Gate Current	.....	50 mA
Total Package 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

Si-200  
See Section 5



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

Characteristic	E420			E421			Unit	Test Conditions
	Min	Typ	Max	Min	Typ	Max		
1 S I <sub>GSS</sub> Gate Reverse Current (Note 1)			-500			-500	pA	$V_{DS} = 0, V_{GS} = -15$ V
2 T V <sub>GS(off)</sub> Gate-Source Cutoff Voltage	-1	-6	-1	-6			V	$V_{DS} = 10$ V, $I_D = 1$ nA
3 T B <sub>VGSS</sub> Gate-Source Breakdown Voltage	-25		-25					$V_{DS} = 0, I_G = -1$ $\mu$ A
4 I C I <sub>DSS</sub> Saturation Drain Current (Note 2)	6	30	6		30		mA	$V_{DS} = 10$ V, $V_{GS} = 0$
5 I G Gate Current (Note 1)		-500		-500			pA	$V_{DG} = 10$ V, $I_D = 5$ mA
6 D g <sub>fs</sub> Common-Source Forward Transconductance	4,500		9,000	4,500		9,000	$\mu\text{mho}$	$f = 1$ kHz
7 A g <sub>os</sub> Common-Source Output Conductance			200			200		
8 M C <sub>iss</sub> Common-Source Input Capacitance		3.5			3.5		pF	
9 C <sub>rss</sub> Common-Source Reverse Transfer Capacitance		0.8			0.8			$f = 1$ MHz
10 M I V <sub>GS1</sub> -V <sub>GS2</sub>   Differential Gate-Source Voltage			10			20	mV	$V_{DG} = 10$ V, $I_D = 5$ mA

#### NOTES:

1. Approximately doubles for every 10°C increase in  $T_A$ .
2. Pulse test duration = 300  $\mu$ sec; duty cycle  $\leq 3\%$ .

NZF