

n-channel JFETs designed for . . .



Performance Curves NCB
See Section 4

- Analog Switches
- Commutators
- Choppers

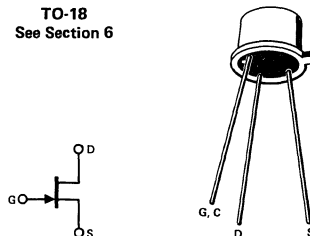
BENEFITS

- Low Insertion Loss
 $r_{DS(on)} < 50 \Omega$ (U202)
- Good Off-Isolation
 $I_{D(off)} < 1 \text{ nA}$

ABSOLUTE MAXIMUM RATINGS (25°C)

Gate-Drain or Gate-Source Voltage -30 V
 Gate Current 50 mA
 Total Device Dissipation at 25°C Case Temperature
 (Derate 10 mW/°C) 1.8 W
 Storage Temperature Range -65 to +200°C
 Lead Temperature
 (1/16" from case for 10 seconds) 300°C

TO-18
See Section 6



ELECTRICAL CHARACTERISTICS (25°C unless otherwise noted)

Characteristic			U200		U201		U202		Unit	Test Conditions	
			Min	Max	Min	Max	Min	Max			
S T A T I C	1	I_{GSS} Gate Reverse Current		-1		-1		-1	nA	$V_{GS} = -20 \text{ V}, V_{DS} = 0$	
	2			-1		-1		-1	μA		150°C
	3	BV_{GSS} Gate-Source Breakdown Voltage	-30		-30		-30		V	$I_G = -1 \mu\text{A}, V_{DS} = 0$	
	4	$V_{GS(off)}$ Gate-Source Cutoff Voltage	-0.5	-3	-1.5	-5	-3.5	-10		$V_{DS} = 20 \text{ V}, I_D = 10 \text{ nA}$	
5	I D C	$I_{D(off)}$ Drain Cutoff Current		1		1		1	nA	$V_{DS} = 10 \text{ V}, V_{GS} = -12 \text{ V}$	
				1		1		1	μA		150°C
6		I_{DSS} Saturation Drain Current (Note 1)	3	25	15	75	30	150	mA	$V_{DS} = 20 \text{ V}, V_{GS} = 0$	
7	D Y N	$r_{DS(on)}$ Drain-Source ON Resistance		150		75		50	ohm	$V_{GS} = 0, I_D = 0$	$f = 1 \text{ kHz}$
8		C_{iss} Common-Source Input Capacitance (Note 1)		30		30		30	pF	$V_{DS} = 20 \text{ V}, V_{GS} = 0$	$f = 1 \text{ MHz}$
9		C_{rss} Common-Source Reverse Transfer Capacitance		8		8		8		$V_{DS} = 0, V_{GS} = -12 \text{ V}$	

NOTE:

1. Pulse test required, pulsewidth = 300 μsec , duty cycle $\leq 3\%$.

NCB