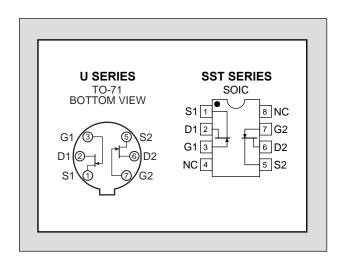


Linear Integrated Systems

FEATURES					
Direct Replacement for SILICONIX U/SST44	0 & U/SST441				
HIGH CMRR	CMRR ≥ 85dB				
LOW GATE LEAKAGE I _{GSS} ≤ 1pA					
ABSOLUTE MAXIMUM RATINGS ¹					
@ 25 °C (unless otherwise stated)					
Maximum Temperatures					
Storage Temperature	-65 to +150 °C				
Operating Junction Temperature	-55 to +135 °C				
Maximum Power Dissipation					
Continuous Power Dissipation (Total)	500mW				
Maximum Currents					
Gate Current	50mA				
Maximum Voltages					
Gate to Drain	-25V				
Gate to Source	-25V				
Gate to Gate	±50V				

U/SST440,441

MONOLITHIC DUAL N-CHANNEL JFET



MATCHING CHARACTERISTICS @ 25 °C (unless otherwise stated)

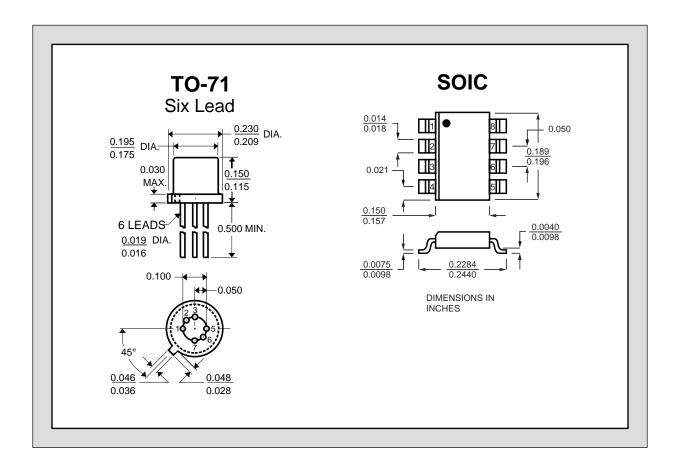
SYMBOL	CHARACTERISTIC		MIN	TYP	MAX	UNITS	CONDITIONS
V _{GS1} – V _{GS2}	Differential Gate to Source Cutoff Voltage	U/SST440			10	mV	V _{DG} = 10V, I _D = 5mA
		U/SST441			20		
$\frac{\Delta \left V_{\text{GS1}} - V_{\text{GS2}} \right }{\Delta T}$	Differential Gate to Source Cutoff Voltage Change with Temperature			20		μV/°C	$V_{DG} = 10V, I_D = 5mA$ $T_A = -55 \text{ to } +125^{\circ}\text{C}$
-	0 0 1						
I _{DSS1} I _{DSS2}	Gate to Source Saturation C	urrent Ratio		0.07			$V_{DS} = 10V, V_{GS} = 0V$
<u>gfs1</u>	Forward Transconductance Ratio ²			0.97			$V_{DS} = 10V, I_{D} = 5mA, f = 1kHz$
g _{fs2}	Tornara Transconductarios	tatio		0.07			V D S 10 V , 1 D S 11 J , 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
CMRR	Common Mode Rejection Ra	ıtio		85		dB	V_{DG} = 5 to 10V, I_D = 5mA

ELECTRICAL CHARACTERISTICS @ 25 °C (unless otherwise stated)

SYMBOL	CHARACTERISTIC	MIN	TYP	MAX	UNITS	CONDITIONS
BV _{GSS}	Gate to Source Breakdown Voltage	-25			٧	$I_{G} = -1\mu A, V_{DS} = 0V$
$V_{GS(off)}$	Gate to Source Cutoff Voltage	-1	-3.5	-6	٧	$V_{DS} = 10V, I_{D} = 1nA$
I _{DSS}	Gate to Source Saturation Current ³	6	15	30	mA	$V_{DS} = 10V, V_{GS} = 0V$
I _{GSS}	Gate Leakage Current		-1	-500	nΛ	$V_{GS} = -15V, V_{DS} = 0V$
I _G	Gate Operating Current		-1	-500	pА	$V_{DG} = 10V, I_{D} = 5mA$

ELECTRICAL CHARACTERISTICS CONTINUED @ 25 °C (unless otherwise stated)

SYMBOL	CHARACTERISTIC	MIN	TYP	MAX	UNITS	CONDITIONS
g _{fs}	Forward Transconductance	4.5	6	9	mS	$V_{DS} = 10V, I_{D} = 5mA, f = 1kHz$
gos	Output Conductance		70	200	μS	
C _{iss}	Input Capacitance		3		, F	\/ = 10\/ = 5\\\ f = 1\\\
C _{rss}	Reverse Transfer Capacitance		1		pF	$V_{DS} = 10V, I_{D} = 5mA, f = 1MHz$
e _n	Equivalent Input Noise Voltage		4		nV/√Hz	$V_{DS} = 10V, I_D = 5mA, f = 10kHz$



- Absolute maximum ratings are limiting values above which serviceability may be impaired. 1.
- 2. Pulse Test: PW ≤ 300µs Duty Cycle ≤ 3%
- Assumes smaller value in numerator.

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