LINEAR SYSTEMS

LS4351
N-CHANNEL MOSFET

micross

The LS4351 is an enhancement mode N-Channel Mosfet

The LS4351 is an enhancement mode N-Channel Mosfet designed for use as a General Purpose amplifier or switch

The hermetically sealed TO-72 package is well suited for high reliability and harsh environment applications.

(See Packaging Information).

LS4351 Features:

- Low ON Resistance
- Low Capacitance
- High Gain
- High Gate Breakdown Voltage
- Low Threshold Voltage

FEATURES	
DIRECT REPLACEMENT FOR INTERSIL 2N4351	
HIGH DRAIN CURRENT	I_D = 100mA
HIGH GAIN	g_{fs} = 1000µS

ABSOLUTE MAXIMUM RATINGS
@ 25°C (unless otherwise noted)

Maximum Temperatures	
Storage Temperature	-65°C to +200°C
Operating Junction Temperature	-55°C to +150°C
Maximum Power Dissipation	
Continuous Power Dissipation	375mW
MAXIMUM CURRENT	
Drain to Source (Note 1)	100mA
MAXIMUM VOLTAGES	
Drain to Body	25V
Drain to Source	25V
Peak Gate to Source (Note 2)	±125V

LS4351 ELECTRICAL CHARACTERISTICS @ 25°C (unless otherwise noted)

SYMBOL	CHARACTERISTIC	MIN	TYP.	MAX	UNITS	CONDITIONS
BV$_{DSS}$	Drain to Source Breakdown Voltage	25	--	--		I_D = 10µA, V_{GS} = 0V
V$_{DS(on)}$	Drain to Source "On" Voltage	--	--	1	V	I_D = 2mA, V_{GS} = 10V
V$_{GS(th)}$	Gate to Source Threshold Voltage	1	--	5		V_{DS} = 10V, I_D = 10µA
I$_{GSS}$	Gate Leakage Current	--	--	10	pA	V_{GS} = ±30V, V_{DS} = 0V
I$_{DSS}$	Drain Leakage Current "Off"	--	--	10	nA	V_{GS} = 10V, V_{DS} = 10V
I$_{D(on)}$	Drain Current "On"	3	--	--	mA	V_{GS} = 10V, V_{DS} = 10V
g$_{fs}$	Forward Transconductance	1000	--	--	µS	V_{DS} = 10V, I_D = 2mA, f = 1MHz
r$_{DS(on)}$	Drain to Source "On" Resistance	--	--	300	Ω	V_{GS} = 10V, I_D = 0A, f = 1kHz
C$_{rss}$	Reverse Transfer Capacitance	--	--	1.3		V_{DS} = 0V, V_{GS} = 0V, f = 140kHz
C$_{iss}$	Input Capacitance	--	--	5	pF	V_{DS} = 10V, V_{GS} = 0V, f = 140kHz
C$_{db}$	Drain to Body Capacitance	--	--	5.0		V_{DB} = 10V, f = 140kHz

SWITCHING CHARACTERISTICS

SYMBOL	CHARACTERISTIC	MAX	UNITS
t$_{d(on)}$	Turn On Delay Time	45	
t$_r$	Turn On Rise Time	65	ns
t$_{d(off)}$	Turn Off Delay Time	60	
t$_f$	Turn Off Fall Time	100	

TIMING WAVEFORMS
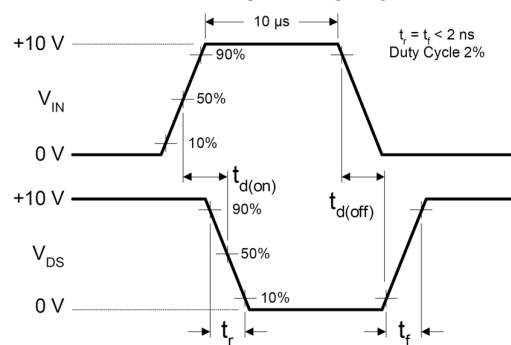
SWITCHING TEST CIRCUIT
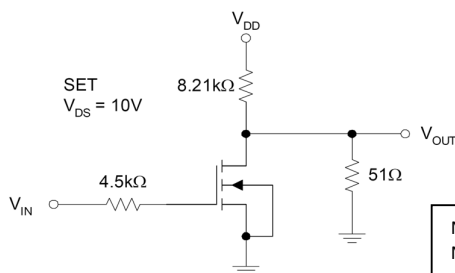
Note 1 - Absolute maximum ratings are limiting values above which LS4351 serviceability may be impaired.
Note 2 - Device must not be tested at ±125V more than once or longer than 300ms.

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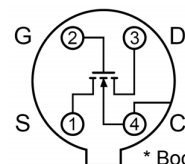
Available Packages:

LS4351 in TO-72
LS4351 in bare die.

Please contact Micross for full package and die dimensions

TO-72 (Bottom View)

* Body tied to case