

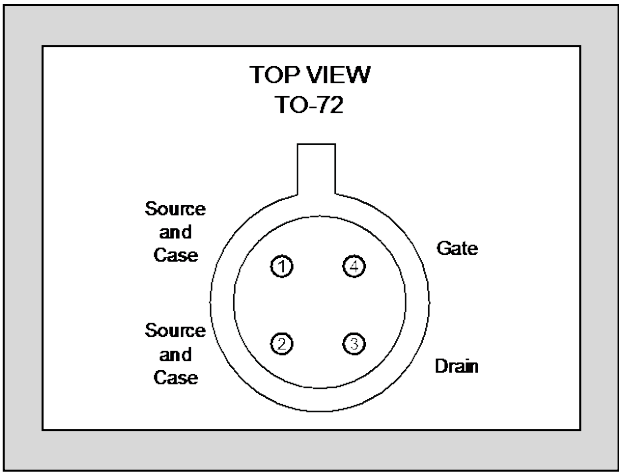


Over 30 Years of Quality Through Innovation

LS320

HIGH INPUT IMPEDANCE BIFET AMPLIFIER

FEATURES	
HIGH INPUT IMPEDANCE	$r_{GS} = 100G\Omega$
HIGH TRANSCONDUCTANCE	$Y_{FS} = 30,000\mu S$
ABSOLUTE MAXIMUM RATINGS ¹ @ 25 °C (unless otherwise stated)	
Maximum Temperatures	
Storage Temperature	-55 to +150 °C
Operating Junction Temperature	-55 to +125 °C
Maximum Power Dissipation	
Continuous Power Dissipation @ +25 °C	200mW
Maximum Currents	
Drain Current	$I_D = 25mA$
Maximum Voltages	
Drain to Source ¹	$V_{DSO} = 20V$
Gate to Source	$V_{GSS} = 20V$

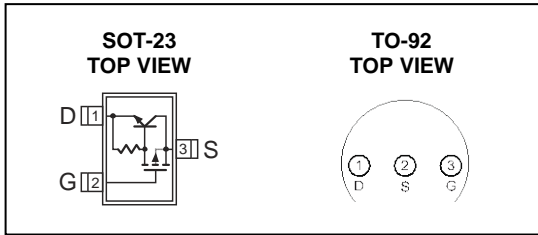


ELECTRICAL CHARACTERISTICS @ 25 °C (unless otherwise stated)

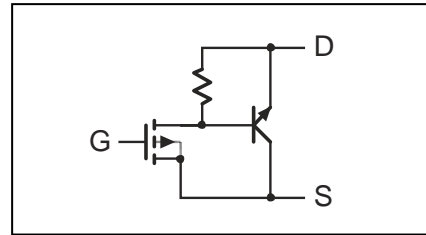
SYMBOL	CHARACTERISTIC	MIN	TYP	MAX	UNITS	CONDITIONS
V_{DS}	Drain to Source Voltage	-20			V	$I_{DS} = 100\mu A, V_{GS} = 0V$
V_{GS}	Gate to Source Voltage	-7	-10	-12	V	$I_{DS} = 10mA, V_{DS} = -10V^{2,3}$
g_{fs}	Common Source Forward Transconductance	30,000			μS	$I_{DS} = 10mA, V_{DS} = -10V, f = 1kHz$
g_{oss}	Common Source Output Conductance		300		μS	$I_{DS} = 10mA, V_{DS} = -10V, f = 1kHz$
r_{GS}	Gate to Source Input Resistance	100			$G\Omega$	$V_{GS} = 0 \text{ to } 20V, T_J \text{ to } 125\text{ °C}$
C_{ISS}	Input Capacitance		8		pF	$I_{DS} = 10mA, V_{DS} = -10V$
C_{RSS}	Reverse Transfer Capacitance		1.5		pF	$I_{DS} = 10mA, V_{DS} = -10V$
e_n	Noise Voltage		25		μV	$I_{DS} = 10mA, V_{DS} = 10V$ $BW = 50 \text{ to } 15kHz$

All limits are absolute numbers. Negative signs indicate electrical polarity.

PACKAGE OPTIONS



FUNCTIONAL



NOTES:

1. Absolute maximum ratings are limiting values above which serviceability may be impaired.
2. The gate to source voltage must never exceed 100V, $t < 10\text{ms}$.
3. Additional screening available

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