

LINEAR SYSTEMS

Twenty-Five Years Of Quality Through Innovation

FEATURES

SECOND SOURCE FOR SILICONIX VCR11N

VOLTAGE CONTROLLED RESISTANCE	100 to 200Ω
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ABSOLUTE MAXIMUM RATINGS¹
@ 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@TA=25°C	300mW
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Maximum Current

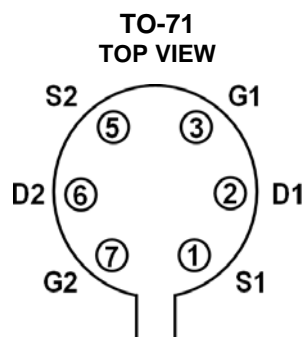
Forward Gate Current	10mA
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Maximum Voltages

Gate to Drain Voltage	25V
Gate to Source Voltage	25V

VCR11N

N-CHANNEL JFET VOLTAGE CONTROLLED RESISTOR



*Contact the factory for surface mount package options and pin outs.

ELECTRICAL CHARACTERISTICS @ 25 °C (unless otherwise stated)

SYMBOL	CHARACTERISTIC	MIN	TYP	MAX	UNITS	CONDITIONS
BV_{GSS}	Gate to Source Breakdown Voltage	-25			V	$I_G = -1\mu A, V_{DS} = 0V$
$V_{GS(off)}$	Gate to Source Cutoff Voltage	-8		-12		$I_D = 1\mu A, V_{DS} = 10V$
I_{GSS}	Gate Reverse Current			-0.2	nA	$V_{GS} = -15V, V_{DS} = 0V$
$r_{ds(on)}$	Dynamic Drain to Source On Resistance	100		200	Ω	$V_{GS} = 0V, I_D = 500\mu A$
		100		200	Ω	$V_{GS} = 0V, I_D = 1mA$
$\frac{r_{DS1}}{r_{DS2}}$	Static Drain to Source On Resistance Ratios	0.95		1		$V_{GS} = 0V, I_D = 500\mu A$
		0.95		1		$V_{GS} = 0V, I_D = 1mA$
C_{dgo}	Drain to Gate Capacitance			8	pF	$V_{GD} = -10V, I_S = 0A, f = 1MHz$
C_{sgo}	Source to Gate Capacitance			8	pF	$V_{GS} = -10V, I_D = 0A, f = 1MHz$

1. Absolute maximum ratings are limiting values above which serviceability may be impaired.

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Linear Integrated Systems (LIS) is a 25-year-old, third-generation precision semiconductor company providing high-quality discrete components. Expertise brought to LIS is based on processes and products developed at Amelco, Union Carbide, Intersil and Micro Power Systems by company President John H. Hall. Hall, a protégé of Silicon Valley legend Dr. Jean Hoerni, was the director of IC Development at Union Carbide, co-founder and vice president of R&D at Intersil, and founder/president of Micro Power Systems.

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