

# LINEAR SYSTEMS

Twenty-Five Years Of Quality Through Innovation

## FEATURES

SECOND SOURCE FOR SILICONIX VCR11N

VOLTAGE CONTROLLED RESISTANCE      100 to 200Ω

**ABSOLUTE MAXIMUM RATINGS<sup>1</sup>**  
@ 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

### Maximum Current

Forward Gate Current      10mA

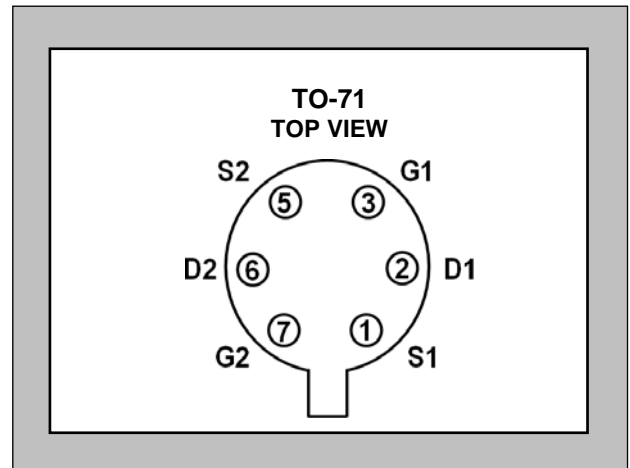
### Maximum Voltages

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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