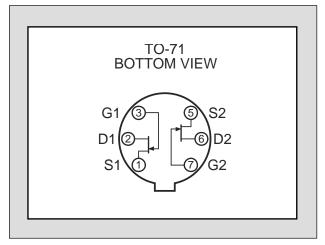


## Linear Integrated Systems

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	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 <sub>GSS</sub>	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	V	$I_D = 1\mu A, V_{DS} = 10V$
$I_{GSS}$	Gate Reverse Current			-0.2	nA	$V_{GS} = -15V, V_{DS} = 0V$
r <sub>ds(on)</sub>	Dynamic Drain to Source On Resistance	100		200	Ω	$V_{GS} = 0V, I_D = 0A, f = 1kHz$
r <sub>DS(min)</sub>	Static Drain to Source On Resistance Ratio	0.95		1		$V_{DS} = 100 \text{mV}, r_{DS} = 200 \Omega^2$
r <sub>DS(max)</sub>		0.95		1		$V_{GS1} = V_{GS2}, r_{DS} = 2k\Omega^2$
$C_{\sf dgo}$	Drain to Gate Capacitance			8	pF	$V_{GD} = -10V$ , $I_{S} = 0A$ , $f = 1MHz$
$C_{sgo}$	Source to Gate Capacitance			8	pF	$V_{GS} = -10V, I_D = 0A, f = 1MHz$

- Absolute maximum ratings are limiting values above which serviceability may be impaired.
- $V_{GS1}$  + Control Voltage necessary to force  $r_{DS}$  to  $200\Omega$  or  $2k\Omega$ .

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