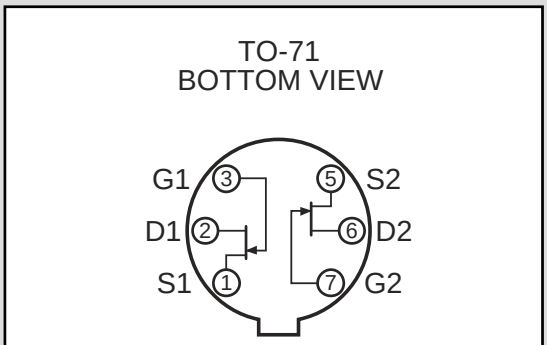
LINEAR SYSTEMS

Linear Integrated Systems

VCR11N

N-CHANNEL JFET VOLTAGE CONTROLLED RESISTOR

FEATURES	
SECOND SOURCE FOR SILICONIX VCR11N	
VOLTAGE CONTROLLED RESISTANCE	100 to 200Ω
ABSOLUTE MAXIMUM RATINGS[1] @ 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



*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 = -1μA, V_{DS} = 0V
$V_{GS(off)}$	Gate to Source Cutoff Voltage	-8		-12		I_D = 1μA, 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 = 0A, *f* = 1kHz
$r_{DS(min)}$	Static Drain to Source On Resistance Ratio	0.95		1		V_{DS} = 100mV, r_{DS} = 200Ω[2]
$r_{DS(max)}$		0.95		1		V_{GS1} = V_{GS2}, r_{DS} = 2kΩ[2]
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.
2. V_{GS1} + Control Voltage necessary to force r_{DS} to 200Ω or 2kΩ.

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