

VCR11N

N-Channel Silicon Voltage Controlled Resistor JFET

- Small Signal Attenuators
- Filters
- Amplifier Gain Control
- Oscillator Amplitude Control

Absolute maximum ratings at $T_A = 25^\circ\text{C}$.

Reverse Gate Source & Reverse Gate Drain Voltage
 Continuous Forward Gate Current
 Continuous Device Power Dissipation
 Power Derating

– 15 V
 10 mA
 300 mW
 2.4 mW/°C

At 25°C free air temperature:

Static Electrical Characteristics

		VCR11N		Process NJ26		
		Min	Max	Unit	Test Conditions	
Gate Source Breakdown Voltage	$V_{(BR)GSS}$	– 25		V	$I_G = -1\ \mu\text{A}$, $V_{DS} = 0\text{V}$	
Gate Reverse Current	I_{GSS}		– 0.2	nA	$V_{GS} = -15\text{V}$, $V_{DS} = 0\text{V}$	
Gate Source Cutoff Voltage	$V_{GS(OFF)}$	– 8	– 12	V	$I_D = 1\ \mu\text{A}$, $V_{DS} = -10\text{V}$	
Static Drain Source ON Resistance Ratio	$r_{DS(MIN)}$	.95	1		$V_{DS} = 100\text{ mV}$, $r_{DS1} = 200\Omega$	
	$r_{DS(MAX)}$	.95	1		$V_{GS1} = V_{GS2}$, $r_{DS1} = 2\text{ k}\Omega$	

Dynamic Electrical Characteristics

Drain Source ON Resistance	$r_{ds(on)}$	70	200	Ω	$V_{GS} = 0\text{V}$, $I_D = 0\text{A}$	$f = 1\text{ kHz}$
Drain Gate Capacitance	C_{dg}		7.5	pF	$V_{DG} = 10\text{V}$, $I_S = 0\text{A}$	$f = 1\text{ MHz}$
Source Gate Capacitance	C_{sg}		7.5	pF	$V_{GS} = 10\text{V}$, $I_D = 0\text{A}$	$f = 1\text{ MHz}$

TO-71 Package

Dimensions in Inches (mm)

Pin Configuration

1 Source , 2 Drain 1, 3 Gate 1,
 5 Source 2, 6 Drain 2, 7 Gate 2



InterFET Corporation

1000 N. Shiloh Road, Garland, TX 75042
 (972) 487-1287 FAX (972) 276-3375

www.interfet.com