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°C.

Reverse Gate Source & Reverse Gate Drain Voltage	– 15 V
Continuous Forward Gate Current	10 mA
Continuous Device Power Dissipation	300 mW
Power Derating	2.4 mW/°C

At 25°C free air temperature: Static Electrical Characteristics		VCR11N Min	VCR11N Max	Process NJ26 Unit	Process NJ26 Test Conditions	
Gate Source Breakdown Voltage	$V_{(BR)GSS}$	– 25		V	I_G = – 1 µA, V_{DS} = ØV	
Gate Reverse Current	I_{GSS}		– 0.2	nA	V_{GS} = – 15V, V_{DS} = ØV	
Gate Source Cutoff Voltage	$V_{GS(OFF)}$	– 8	– 12	V	I_D = 1 µA, V_{DS} = – 10V	
Static Drain Source ON Resistance Ratio	$r_{DS(MIN)}$	.95	1		V_{DS} = 100 mV, r_{DS1} = 200Ω	
	$r_{DS(MAX)}$	.95	1		V_{GS1} = V_{GS2}, r_{DS1} = 2 kΩ	
Dynamic Electrical Characteristics						
Drain Source ON Resistance	$r_{ds(on)}$	70	200	Ω	V_{GS} = ØV, I_D = ØA	f = 1 kHz
Drain Gate Capacitance	C_{dg}		7.5	pF	V_{DG} = 10V, I_S = ØA	f = 1 MHz
Source Gate Capacitance	C_{sg}		7.5	pF	V_{GS} = 10V, I_D = ØA	f = 1 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

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