

VCR3P

P-Channel Silicon Voltage Controlled Resistor JFET

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

Absolute maximum ratings at $T_A = 5^\circ\text{C}$.

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

		VCR3P		Process PJ99		
		Min	Max	Unit	Test Conditions	
Gate Source Breakdown Voltage	$V_{(BR)GSS}$	15		V	$I_G = 1\ \mu\text{A}$, $V_{DS} = 0\text{V}$	
Gate Reverse Current	I_{GSS}		20	nA	$V_{GS} = 15\text{V}$, $V_{DS} = 0\text{V}$	
Gate Source Cutoff Voltage	$V_{GS(OFF)}$	1	5	V	$I_D = -1\ \mu\text{A}$, $V_{DS} = -10\text{V}$	

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}		25	pF	$V_{DG} = 10\text{V}$, $I_S = 0\text{A}$	$f = 1\text{ MHz}$
Source Gate Capacitance	C_{sg}		15	pF	$V_{GS} = 10\text{V}$, $I_D = 0\text{A}$	$f = 1\text{ MHz}$

TO-18 Package

Dimensions in Inches (mm)

Pin Configuration

1 Source, 2 Gate & Case, 3 Drain

