

# VS79L06 Three-terminal negative voltage regulator

### **FEATURES**

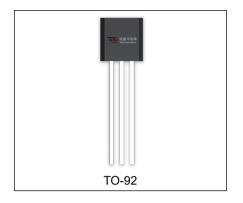
Maximum output current

I<sub>OM:</sub> 0.1A

Output voltage

V<sub>o</sub>: -6V Continuous total dissipation

P<sub>D</sub>:0.625 W (T<sub>a</sub>= 25 °C)



#### **ORDERING INFORMATION**

Part Number	Package	Packing Method	Pack Quantity
VS79L06	TO-92	Bulk	1000pcs/Bag
VS79L06-TA	TO-92	Tape	2000pcs/Box

### ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V <sub>i</sub>	-30	V
Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	200	°C/W
Operating Junction Temperature Range	T <sub>OPR</sub>	-40~+125	°C
Storage Temperature Range	T <sub>STG</sub>	-65~+150	°C



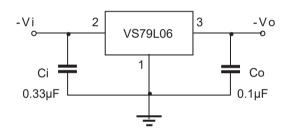
## $T_a$ =25 $^{\circ}$ C unless otherwise specified

(VI=-11V,Io=40mA,Ci=0.33  $\mu$ F,Co=0.1 $\mu$ F, unless otherwise specified )

Parameter	Symbol	Test conditions	Min	Тур	Max	Unit
Output Voltage	Vo	T <sub>J</sub> =25℃	-5.82	-6.0	-6.18	V
		-8V≤V <sub>I</sub> ≤-20V, Io=1mA~40mA	-5.7	-6.0	-6.3	V
		lo=1mA~70mA	-5.7	-6.0	-6.3	V
Load Regulation	ΔVο	lo=1mA~100mA ,T <sub>J</sub> =25°C		21	80	mV
		lo=1mA~40mA ,T <sub>J</sub> =25℃		11	40	mV
Line Regulation	ΔVο	-8V≤V <sub>I</sub> ≤-20V ,T <sub>J</sub> =25°C		20	175	mV
		-9V≤V <sub>I</sub> ≤-20V ,T <sub>J</sub> =25°C		15	125	mV
Quiescent Current	lq	T <sub>J</sub> =25℃		3.9	6.0	mA
Quiescent Current Change	Δlq	-9V≤V <sub>I</sub> ≤-20V			1.5	mA
	Δlq	1mA≤V <sub>I</sub> ≤40mA			0.1	mA
Output Noise Voltage	V <sub>N</sub>	10Hz≤f≤100KHz ,T <sub>J</sub> =25°C		44		μV/Vo
Ripple Rejection	RR	-9V≤V <sub>I</sub> ≤-19V,f=120HZ	40	48		dB
Dropout Voltage	Vd	T <sub>J</sub> =25°C		1.7		V

<sup>\*</sup> Pulse test.

### **TYPICAL APPLICATION**



Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close possible to the regulators.



