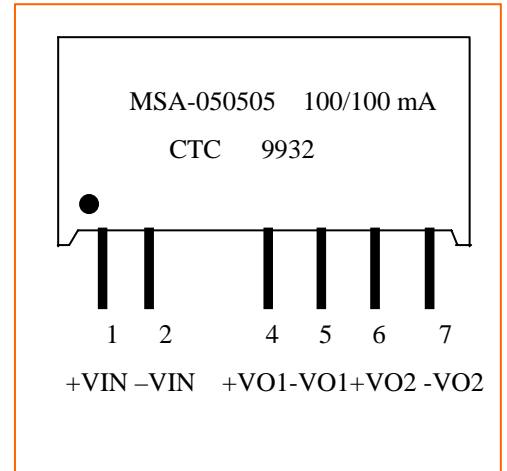


# CTC COIL TECHNOLOGY CORPORATION

## DC/DC CONVERTER MSA-XXXXXX SERIES 1W DUAL OUTPUT

### ELECTRICAL SPECIFICATIONS: UNREGULATED

- Input voltage range -----  $\pm 10\%$
- Input filter----- Capacitor.
- Output voltage accuracy -----  $\pm 5\%$
- Line voltage regulation ----- 1.2%Typ./1%Of Vin
- Load voltage regulation (10% ~ 100%)-  
5V Output Types----- 15% Max.  
9V,12V and 15V Output Types----- 10% Max.
- Ripple&noise/20MHZ BW ----- 75mV P-P Max.
- Efficiency at full load----- 70% Min.
- Isolation voltage ----- 1000Vdc Min.
- Short circuit protection ----- 1.0 Second
- Operating temperature range -----  $-40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$
- Storage temperature range -----  $-55^{\circ}\text{C}$  to  $125^{\circ}\text{C}$
- Isolation resistance ----- 10G  $\Omega$  Min.
- Isolation capacity ----- 90pF Typ.
- Package weight----- 2.2g



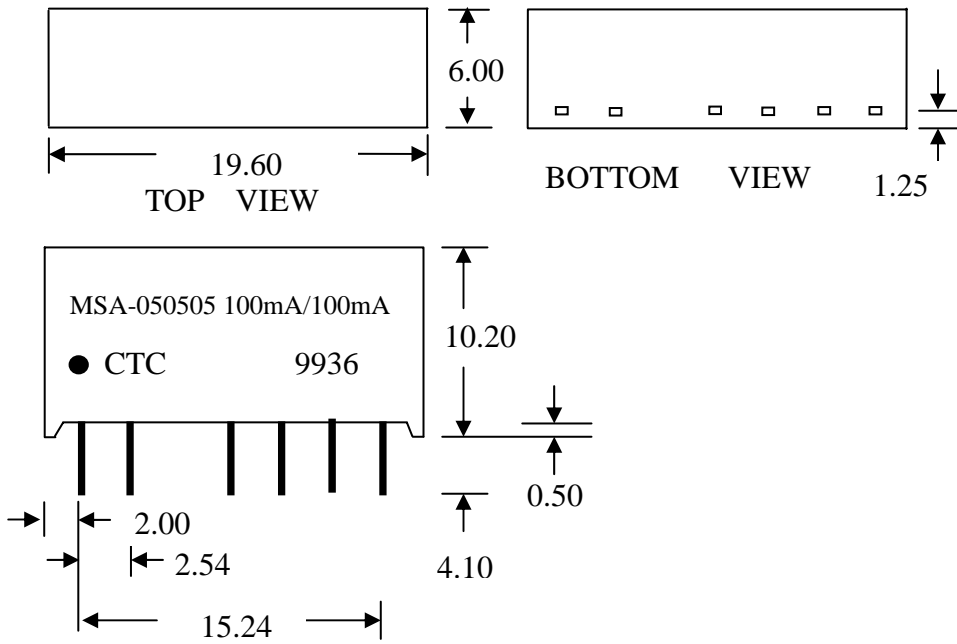
\*Note: Measured @ 25 With The Condition of Vin = Nominal And Full Load.

**Note: They are also available for Vin = 15Vdc and 24Vdc**

### Selection Guide

Part Number	Input Voltage (VDC)	Output VO1 Voltage (VDC)	Output VO2 Voltage (VDC)	Output vO1/vO2 Current (mA)	Efficiency (%)
MSA-050503	5	5	3.3	100/152	70 %
MSA-050505	5	5	5	100/100	70
MSA-050509	5	5	9	100/55	75
MSA-050512	5	5	12	100/42	75
MSA-050515	5	5	15	100/32	78
MSA-050909	5	9	9	55/55	75
MSA-051212	5	12	12	42/42	78
MSA-051515	5	15	15	33/33	80
MSA-120503	12	5	3.3	100/152	70
MSA-120505	12	5	5	100/100	70
MSA-120509	12	5	9	100/55	75
MSA-120512	12	5	12	100/42	75
MSA-120515	12	5	15	100/33	78
MSA-120909	12	9	9	55/55	75
MSA-121212	12	12	12	42/42	78
MSA-121515	12	15	15	33/33	80

# Package Style And Pinning (mm)



PIN	FUNCTION
1	+VIN
2	-VIN
4	+VO1
5	-VO1
6	+VO2
7	-VO2

\*Note : Terminal ----- 0.51 X 0.25 Flat  
TOL. : ±0.25mm  
UNIT : mm