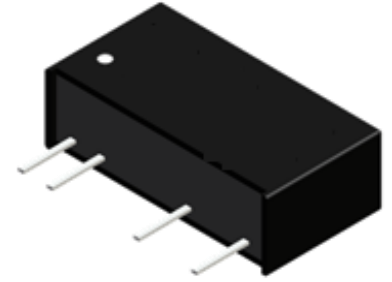


Features

- 3W output power in compact SIP7 package
- 3KVdc/4KVdc high isolation
- -40°C to +90°C wide operating temperature
- No minimum load required
- High efficiency up to 90.5%
- EMC-EN55022/55024
- RoHS compliant

Application

- Input voltage range from 5V to 24V
- Industry control application
- High efficiency application



Selection Guide

Part number	Input voltage	Output voltage (VDC)	Output current (mA)	Load regulation ⁽¹⁾ (max.)	Efficiency ⁽²⁾ (Typ.)	Capacitive load ⁽³⁾ (max.)
M3V-0505J	5VDC (±10%)	5	600	15%	85%	2000µF
M3V-0512J		12	250	10%	86%	1000µF
M3V-0515J		15	200	10%	88%	820µF
M3V-0505DJ		±5	±300	15%	85.5%	±1000µF
M3V-0515DJ		±15	±100	10%	87.5%	±330µF
M3V-1205J	12VDC (±10%)	5	600	15%	84%	2000µF
M3V-1212J		12	250	10%	87%	1000µF
M3V-1215J		15	200	10%	85%	820µF
M3V-1205DJ		±5	±300	15%	84.5%	±1000µF
M3V-1509J	15VDC (±10%)	9	333	10%	88%	1200µF
M3V-1509DJ		±9	±167	10%	88.5%	±470µF
M3V-243.3J	24VDC (±10%)	3.3	909	15%	81.5%	2000µF
M3V-2405J		5	600	15%	86%	2000µF
M3V-2412J		12	250	10%	90%	1000µF
M3V-2415J		15	200	10%	89%	820µF
M3V-2415DJ		±15	±100	10%	90.5%	±330µF

1. The load regulation is from 10% to 100% load.
2. The efficiency is test by nominal input and max. full load @25°C, the efficiency tolerance is ±3%.
3. The capacitive load is test by minimum input and constant resistive load.
4. Add "H" after P/N for isolation 4KVdc. Please check with our sales about efficiency.
5. Add "P" after P/N for short circuit protection function, please contact our sales for efficiency.

Part Number



CTC is the professional and one among world's leading manufacturers of DC-DC/ AC-DC converters.

The products were used in Computers, Industrial controls, Medical equipment, Transportation, EV, ECO-power, Aero-space application and communication.

Specifications

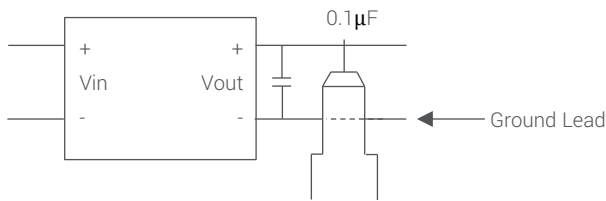
	Parameter	Conditions	Min.	Typ.	Max.	Unit.
Input	Input filter			Internal capacitors		
	Input voltage range		-10		+10	%
Output	Voltage accuracy	Output: 5V		±3	±4	%
		Others		±2	±3	%
	Minimum load		0			%
	Line regulation	LL to HL at 100% load		1.2% typ.@1% of Vin		
	Ripple & noise	@20MHZ BW (@Nominal Vin)			100	mVp-p
	Operating frequency	100% Load at Nominal Vin	20			KHz
Environment	Operating temperature*	Full load & Natural convection @nominal Vin	-40		90	°C
	Storage temperature		-55		125	°C
	Max. case temperature			110		°C
	Relative Humidity		5		95	%RH
Function	Isolation voltage	1sec., Input to output	3000			VDC
		Add suffix "H"	4000			VDC
	Isolation resistance		15			GΩ
	Isolation capacitance				130	pF
	Short Circuit Protection	Add suffix "P"			Continuous	
	MTBF	25°C			20.8x10 ⁶	Hours
	Vibration				MIL-STD-202G	
	Safety Approvals				EN60950	
Physical	Case material			UL94V-0 black plastic		
	Potting material			Silicone (UL94V-0)		
	Dimension			19.65 x 7.05 x 10.20 mm		
		Add suffix "P"		21.80 x 9.20 x 11.10 mm		
	Weight				2.8	
Add suffix "P"				4.4		g
EMC	EMI	EN55032		Class B		

1. All specifications valid at nominal input voltage, full load and 25°C.
2. The product information and specifications are subject to change without prior notice.
3. In this datasheet, all test methods are based on our corporate standards.
4. All characteristics are for listed models, and non-standard models may perform differently. Please contact our technical support for more detail.
5. Please contact our technical support for any specific requirement.
6. "EMC filtering suggestion", please check with our sales.

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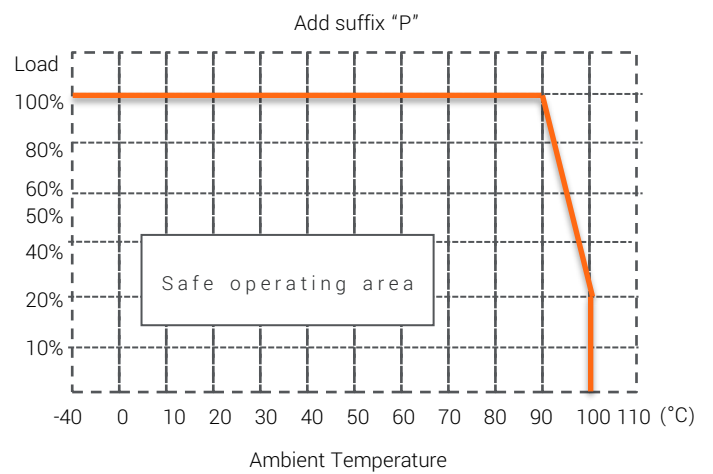
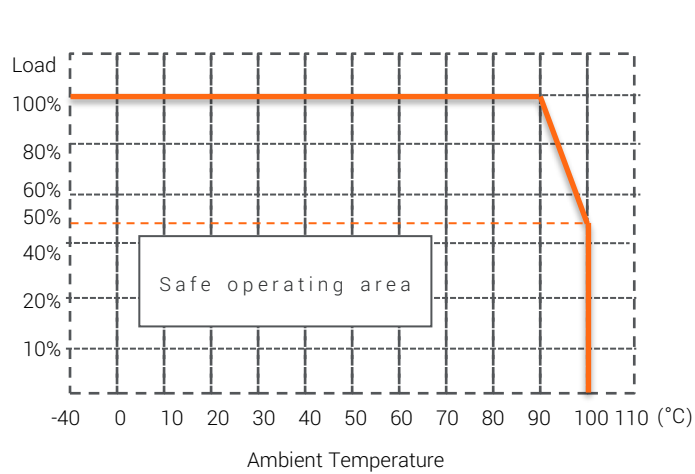
The products were used in Computers, Industrial controls, Medical equipment, Transportation, EV, ECO-power, Aero-space application and communication.

Ripple & Noise Measure Method

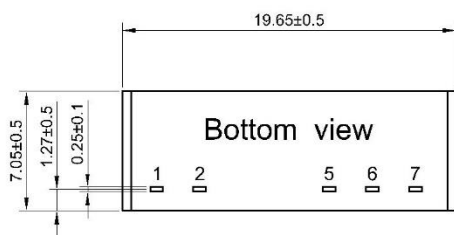
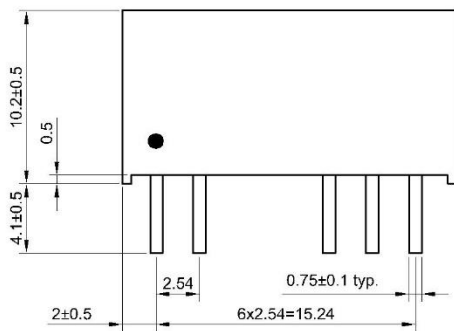


Measured with 20MHz bandwidth and 0.1 μF ceramic capacitor

Derating Curve



Mechanical Dimension & Pinning



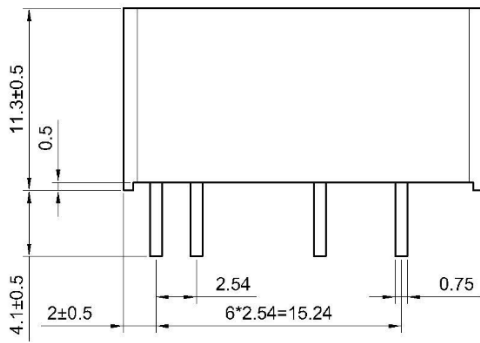
Projection : Third angle projection
 Unit : mm
 Tolerance : ±0.25mm

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
5	-Vout	-Vout
6	No Pin	Com.
7	+Vout	+Vout

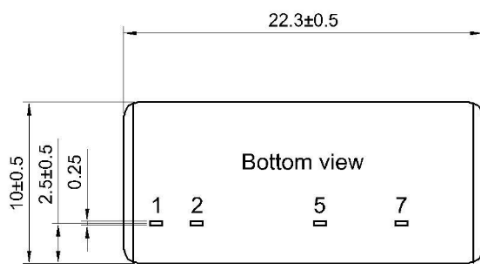
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Add suffix "P"



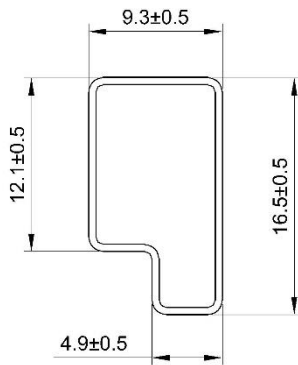
Pin	Function
1	+Vin
2	-Vin
5	-Vout
7	+Vout



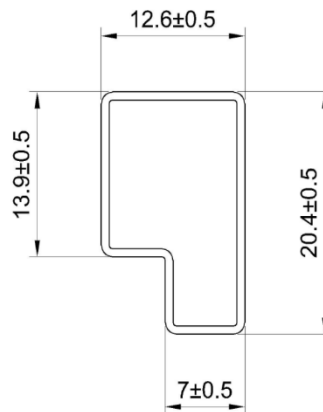
Projection : Third angle projection
 Unit : mm
 PIN setion tolerance : ±0.1
 Tolerance unmarked : ±0.25

Package

Add suffix "P"



UNIT:mm
 1 Tube = 25 pcs
 Length:520±2mm



UNIT : mm
 1 Tube = 22 pcs
 Length : 520±2