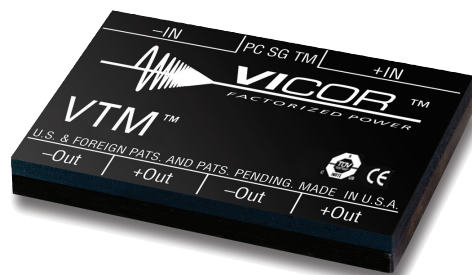


VTM Series

300W DC/DC VOLTAGE TRANSFORMATION MODULE PRELIMINARY

Features

- 48 Vin V•I Chip Converter.
- >92% efficiency at 1.5V.
- Up to 100 A / 300 W.
- 125°C operation.
- High density – up to 365 A/in³ (1,095 W/cm³).
- 1 µs transient response.
- Small footprint: 1.1in² (7.1cm²).
- >3.5 million hours MTBF.
- Low weight – 0.5 oz (14 g).
- J-lead package.
- Pick & Place / SMD compatible.



Voltage Transformation Module (VTM)

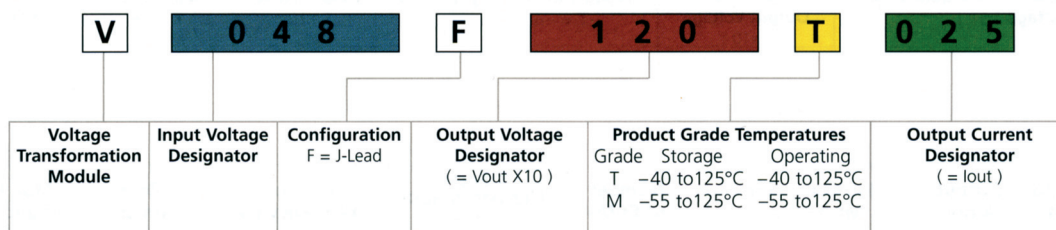
PRODUCT DESCRIPTION

The V•I Chip Voltage Transformation Module (VTM) breaks records for speed, density and efficiency to meet the demands of advanced DSP, FPGA, ASIC, processor cores and microprocessor applications at the point of load (POL) while providing isolation from input to output. It achieves a response time of less than 1 µs and delivers up to 100 A in a volume of less than 0.25 in³ with unprecedented efficiency.

VTMs may be paralleled to deliver hundreds of Amps at an output voltages settable from 0.8 to 55 Vdc.

The V•I Chip power package has a low profile of only 0.25" (6mm) over the board. The VTM's fast dynamic response and low noise eliminate the need for bulk capacitance at the load, substantially increasing the POL density while improving reliability and decreasing cost.

Part Numbering



Input Voltage	K Factor	Vout		Output Current	VTM Model No.
		@ 48 Vin	Range		
26 – 55 Vdc	1/32	1.5 Vdc	0.82 – 1.71 Vdc	100 A	V048F015T100
	1/24	2.0 Vdc	1.09 – 2.29 Vdc	80 A	V048F020T080
	1/16	3.0 Vdc	1.63 – 3.43 Vdc	70 A	V048F030T070
	1/12	3.3 Vdc	2.17 – 4.00 Vdc	60 A	V040F033T060
	1/12	4.0 Vdc	2.17 – 4.58 Vdc	50 A	V048F040T050
	1/8	6.0 Vdc	3.25 – 6.87 Vdc	40 A	V048F060T040
	1/6	8.0 Vdc	4.33 – 8.98 Vdc	30 A	V048F080T030
	1/5	9.6 Vdc	6.00 – 11.00 Vdc	25 A	V048F096T025
	1/4	12.0 Vdc	6.50 – 13.80 Vdc	25 A	V048F120T025
	1/3	16.0 Vdc	8.70 – 18.30 Vdc	15 A	V048F160T015
	1/2	24.0 Vdc	13.00 – 27.50 Vdc	12 A	V048F240T012
	2/3	32.0 Vdc	17.30 – 36.70 Vdc	9 A	V048F320T009
	1	48.0 Vdc	26.00 – 55.00 Vdc	6 A	V048F480T006