

V-I Chip™ BCM™

HV Bus Converter Family

- Efficiency: 95% Typical
- Input: HV 270 / 350 / 380 V
- Power Density: >1000 W/in³
- Current sharing: 5%
- Isolation: 4,242 Vdc
- Footprint: 1.1 in²



22.0
0.87

32.5
1.28

Actual size

mm
in



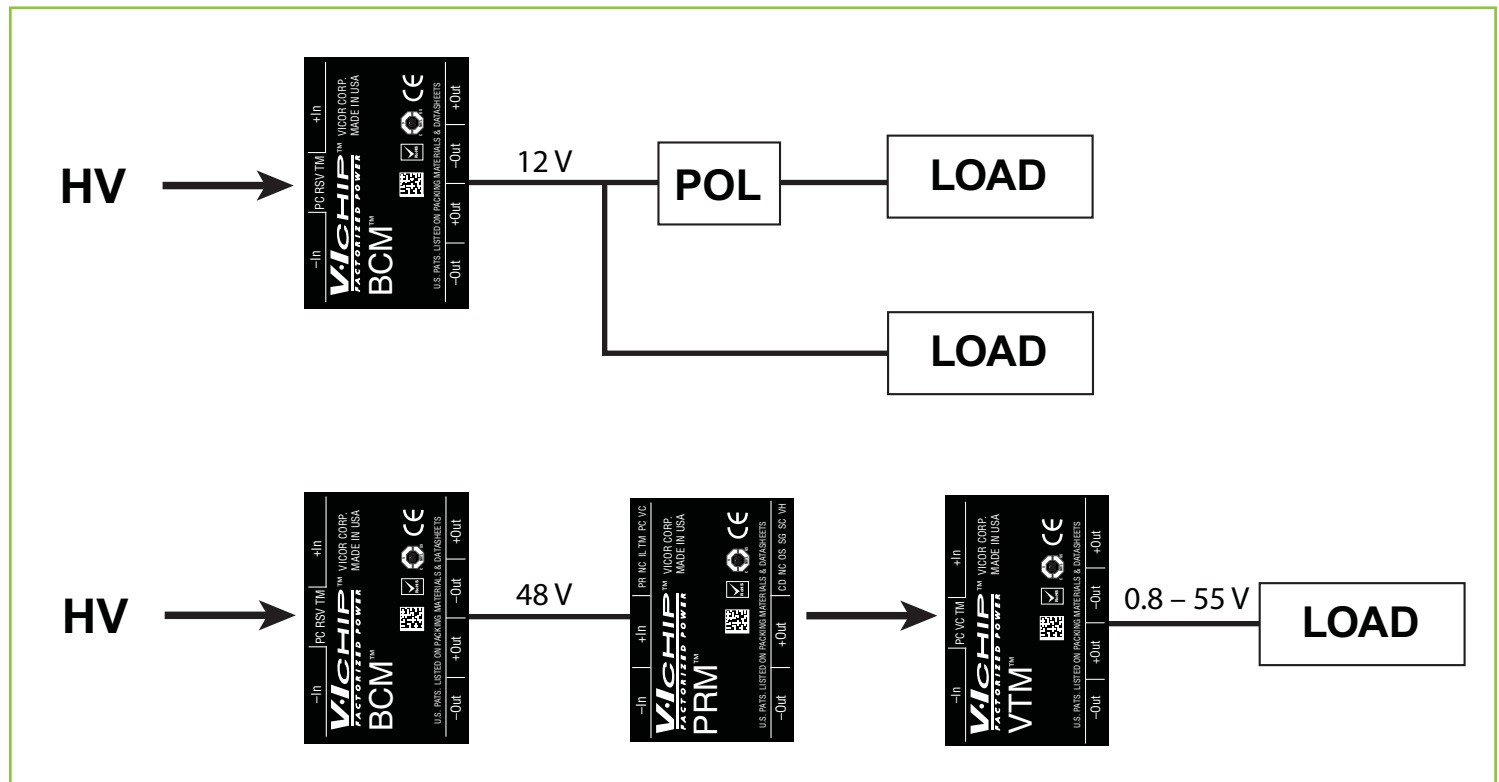
Product Description

The HV Bus Converter modules provide an isolated intermediate bus voltage to power non-isolated POL converters. The HV BCMs offer direct conversion from PFC bus voltage to 12 V POL at up to 300 W with isolation to 4,242 Vdc. The HV family provides superior performance, the highest efficiency and power density in the smallest package available.

Model Number*	Input Voltage (V)	Output Voltage (V)	Output Power (W)	Output Current (A)	Grade
B384F120T30	360 – 400	11.25 – 12.5	300	25.0	Commercial
BCM352F110T300A00	330 – 365	10.3 – 11.4	300	28.0	Commercial
BCM352F125T300A00	330 – 365	11.79 – 13.04	300	26.0	Commercial
BCM352F440T330A00	330 – 365	41.25 – 45.63	325	7.7	Commercial
BCM384F480T325A00	360 – 400	45.0 – 50.0	325	7.0	Commercial
MBCM270F338M235A00	240 – 330	30.0 – 41.25	235	7.3	MIL-COTS
MBCM270F450M270A00	230 – 330	38.3 – 55.0	270	6.25	MIL-COTS

* Products are also available in through-hole model. See individual data sheets.

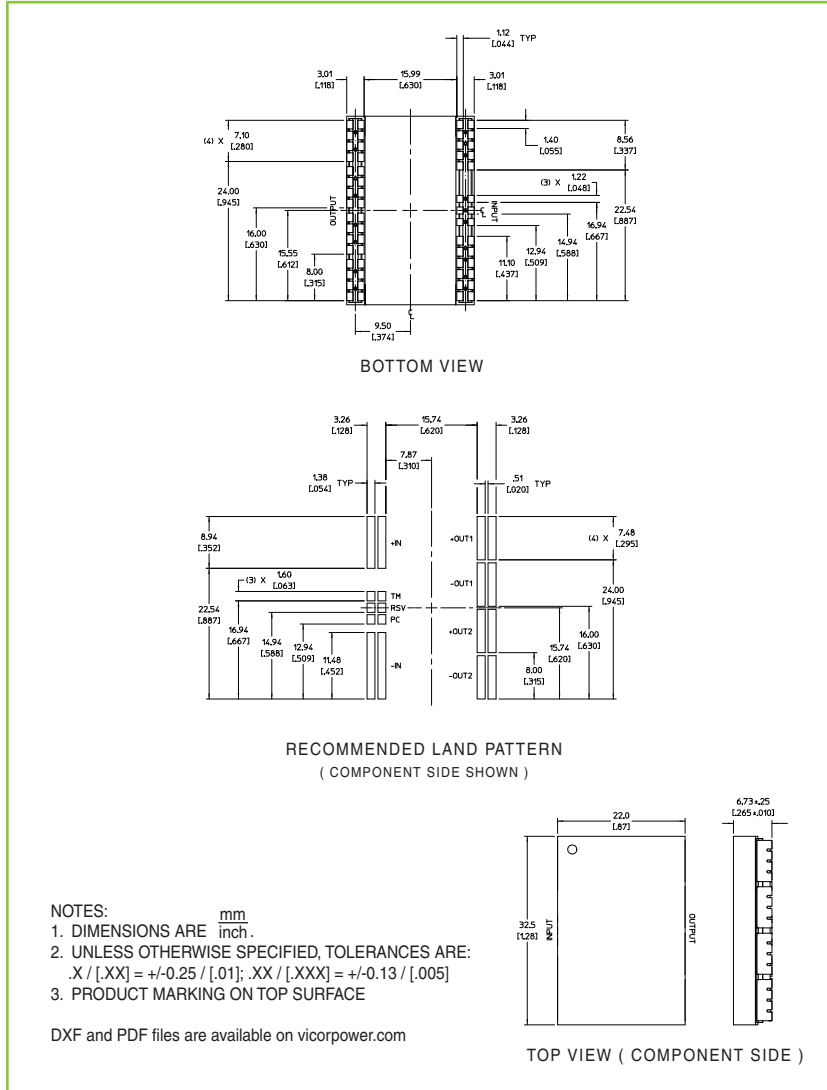
Typical Applications



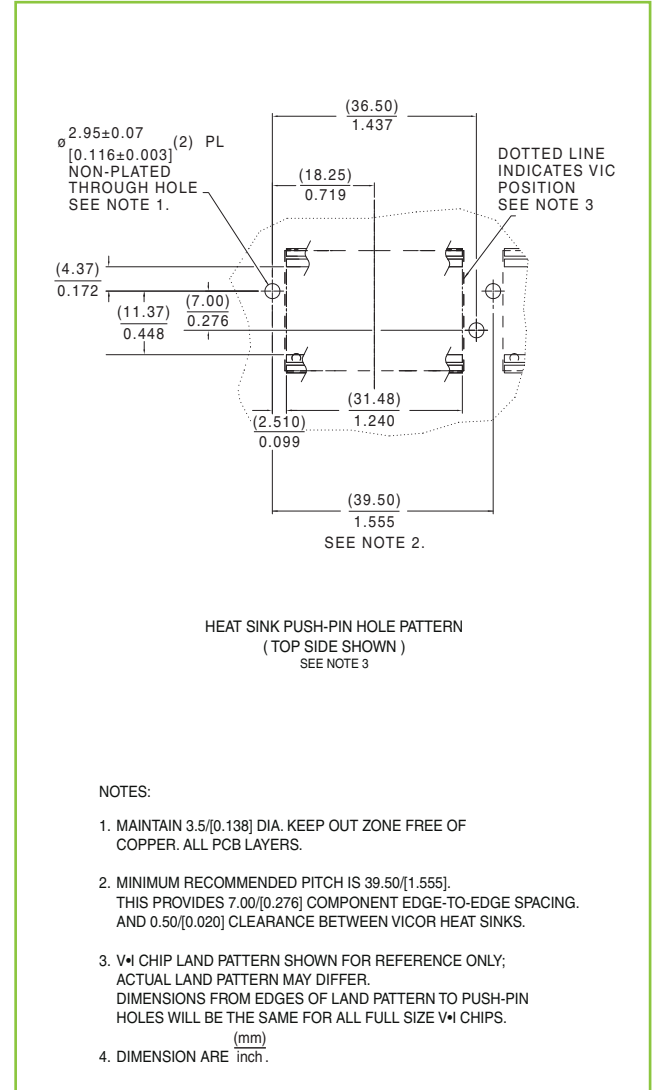
General Specifications

Parameter	Typ	Unit	Note
MTBF			
MIL-HDBK-217F	3.5	Mhrs	25°C, GB
Isolation			
Voltage	4,242	Vdc	Input to output (basic insulation)
Capacitance	500–660	pF	Input to output
Resistance	10	MΩ	Input to output
Regulatory compliance	cTUVus		UL/CSA 60950, EN60950
	CE Mark		Low voltage directive
	RoHS		
Thermal			
Over temperature shutdown	125	°C	minimum, junction temperature
Case-to-ambient thermal impedance	3.7	°C/W	with 0.25" heat sink @ 300 LFM
Operating junction temperature	-40 to 125	°C	T-Grade
Operating junction temperature	-55 to 125	°C	MIL-COTS
Storage temperature	-40 to 125	°C	

BCM Mechanical Outline Drawing*



Heat Sink Push-Pin Hole Pattern



* For through-hole mechanical drawing see individual data sheets.

The products described on this data sheet are protected by the following U.S. Patents Numbers: 5,945,130; 6,403,009; 6,710,257; 6,911,848; 6,930,893; 6,934,166; 6,940,013; 6,969,909; 7,038,917; 7,166,898; 7,187,263; 7,361,844; D496,906; D505,114; D506,438; D509,472 and for use under 6,975,098 and 6,984,965