

V.I Chip™ Filters & Front Ends

MILITARY

MIL-COTS & FILTERS WITH INTEGRATED PRM

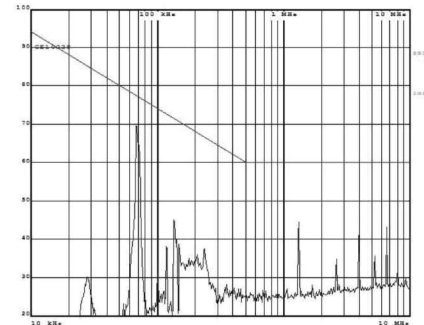
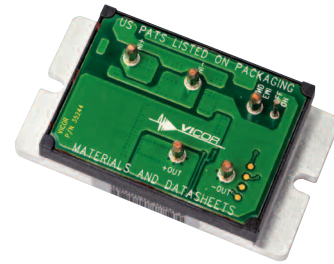
MF028AMFPT MIL-COTS V•I CHIP FILTER

FEATURES

- -55°C to 100°C baseplate operation
- Vin range: 16.5 – 50 Vdc
EMI filtering: MIL-STD-461E/F
- Transient protection
MIL-STD-1275 A/B/D,
MIL-STD-701A/E/F and DO-160E
- Small size: 1.91" x 1.09" x 0.37"
(46,6 x 27,7 x 9,5 mm)
- Low weight: 2.19 oz (62.1g)
- Typical efficiency: 99%
- Architectural flexibility

PRODUCT INFORMATION

The **MIL-COTS** filter is a DC front-end module that provides EMI filtering and transient protection. The filter enables designers using Vicor's MIL-COTS PRM VI Bricks and V•I Chips to meet conducted emission / conducted susceptibility per MIL-STD-461E; and input transients per MIL-STD-704A/E/F, MIL-STD-1275A/B/D and DO-160E. The MIL-COTS PRM filter accepts an input voltage of 16.5 – 50 Vdc and delivers output power up to 120 W.



Conducted Noise; MF028AMFPT and MP028F036M12AL + MV036F120M010 DC-DC V•I Chip modules operating at 28 Vdc, 120 W.

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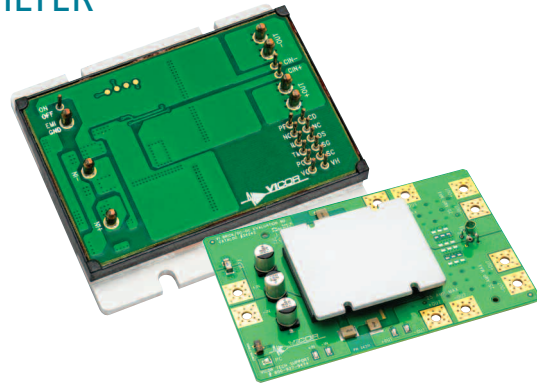
MR028B036M012FPT MIL-COTS V•I CHIP FILTER WITH INTEGRATED PRM

FEATURES

- -55°C to 100°C baseplate operation
- Vin range: 16.5 – 50 Vdc, (13.9 – 50 Vdc after startup)
- EMI filtering: MIL-STD-461E/F
- Transient protection MIL-STD-704A/E/F, MIL-STD-1275A/B/D and DO-160E
- High density: up to 78 W/in³
- Small size: 2.19" x 1.91" x 0.37" (53,7 x 48,6 x 9,5 mm)
- Low weight: 2.19 oz (62.1g)
- ZVS buck-boost regulator
- Typical efficiency: 95%
- 1.3 MHz switching frequency
- Low noise operation
- Architectural flexibility

PRODUCT INFORMATION

The **VI BRICK** Pre-Regulator Module with integrated filter is a very efficient non-isolated regulator capable of both boosting and bucking a wide range input voltage. It is specifically designed to provide a controlled Factorized Bus distribution voltage for powering downstream VI BRICK Current Multiplier Modules — fast, efficient, isolated, low noise Point-of-Load (POL) converters. In combination, VI BRICK PRMs and VTMs form a complete DC-DC converter subsystem offering all of the unique benefits of Vicor's Factorized Power Architecture (FPA): high density and efficiency; low noise operation; architectural flexibility; extremely fast transient response; and elimination of bulk capacitance at the Point-of-Load (POL). In addition, the integrated filter provides compliance to MIL-STD-1275, MIL-STD-704 and DO-160E for (transients) and MIL-STD-461 (EMI).



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