Active EMI Filter Modules



Part Number & Ordering Information*

Family	Input Voltage	Maximum Current	Filter Type / Clamping Voltage	Package	Baseplate	Options
KMFL05	DC28E: 9-40 V	C30: 30 A	DC40: 40 V	HB: Half Brick	F: Flanged H: Half Threaded	-

^{*} Full part numbering and options are available in the data sheet. "-" sign shall be placed in between all fields.

Features & Benefits

- Active EMI filter cased into a half brick package
- Unique suppression circuitry to clamp surge and
- Rated for 30 A output current
- Soft-Start feature to limit in-rush
- Reverse polarity protection
- Short-circuit protection
- ON/OFF control
- Standby feature to minimize quiescent power
- Very low DC resistance and low drop out voltage

Size: 58.4 x 36.8 x 12.9 mm

The absolute maximum ratings below are stress ratings

Value

-40 to +100 °C

-55 to +125 °C

only. Operation at or beyond these maximum ratings

Product Description

KMFL05 is an active EMI filter based on uniquely configured differential-mode and common-mode passive stages with damping circuits that eleminate undesired resonance and oscillations. Unit is also equipped with large value capacitors with series resistors to correct the stability problems caused by the negative input resistance of converters to be interfaced. For extended reliability, our filters are using X7R multilayer ceramic capacitors only.

Thanks to our embedded soft-start circuitry, unit offers an inrush free operation when interfaced with capacitive loads. Similarly, a surge and spike free operation of downstream converts is guaranteed by our transient voltage suppression circuitry. Finally, a low-loss MOSFET based reverse polarity protection feature assures the filter's reliability against any misuse yet not compromissing on the efficiency.

Full LOT traceability

Burn-in at 100 °C baseplate temperature

Absolute Maximum Ratings

may cause permanent to the device.

Temperature cycling

Operating Temperature

Storage Temperature

Paramater

Screening

- Available with different screening grades
- IPC-610, Class III Inspection

Designed to Meet

- MIL-STD-461 (D, E, F, G)
- MIL-STD-704 (A-F)
- MIL-STD-1275 (D, E)
- MIL-STD-810