

MSK**M.S.KENNEDY CORP.****5A
EMI FILTER****BFL2805**

4707 Dey Road Liverpool, N.Y. 13088

(315) 701-6751

HI-REL DESIGN

- REPLACES APEX FDB461
- WELDED HERMETIC PACKAGE
- ALL CERAMIC CAPACITORS
- SURFACE MOUNT MAGNETICS

FEATURES

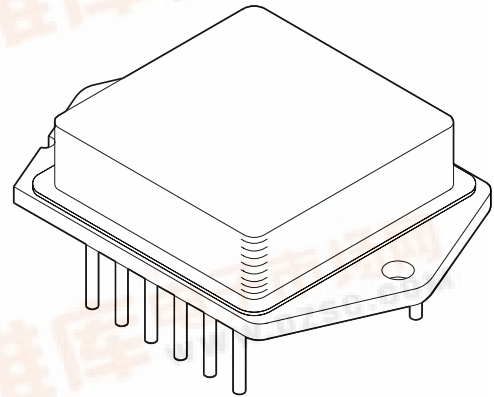
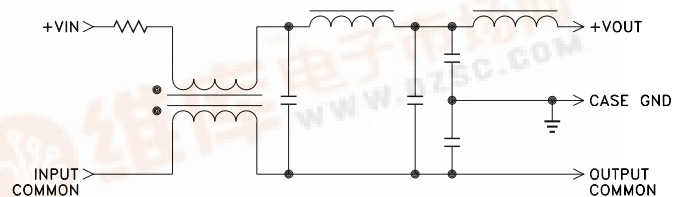
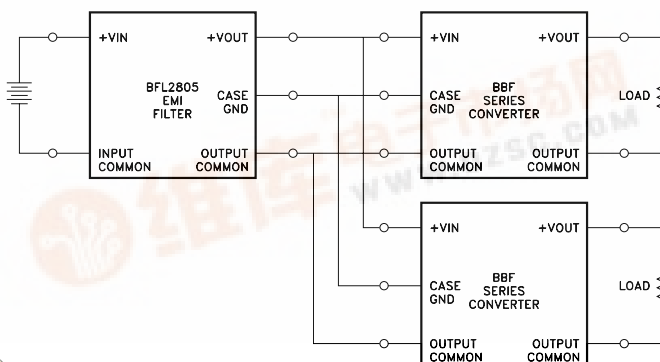
- -55° TO +125°C OPERATION
- 50db MINIMUM DIFFERENTIAL MODE REJECTION AT 500 KHz
- 5.5 AMPS THROUGHPUT CURRENT
- MEETS MIL-STD-461C CEO3 STANDARDS FOR MSK BBF2800 SERIES DC-DC CONVERTERS
- MIL-STD-704A THROUGH E POWER BUS COMPATIBILITY

DESCRIPTION

The BFL2805 is a high reliability EMI filter for use with MSK BBF2800 series of DC-DC converters. This filter has been designed to reduce the input line reflected ripple current to within the limit of MIL-STD-461C, CE03.

BFL2805 hybrid EMI filters utilize all ceramic capacitors, surface mount magnetics and ultrasonically bonded aluminum wires to provide reliable operation at all operating temperatures while surviving very high G forces.

The 12-pin high profile dip package allows connection to a heatsink and is hermetically sealed and isolated from the internal circuits. Heat sinking is recommended for full power operation at elevated ambient temperatures.

**EQUIVALENT SCHEMATIC****TYPICAL APPLICATION****EXTERNAL CONNECTIONS**

1	+VIN	12	N/C
2	INPUT COMMON	11	N/C
3	N/C	10	N/C
4	N/C	9	CASE GROUND
5	N/C	8	+VOUT
6	N/C	7	OUTPUT COMMON



BFL2805

ABSOLUTE MAXIMUM RATINGS SPECIFICATIONS

ABSOLUTE MAXIMUM RATINGS

INPUT VOLTAGE RANGE	0-50Vdc
INPUT VOLTAGE TRANSIENT	50V @ 50 μ s
TEMPERATURE RANGE, storage	-65 to 150°C.
OPERATING TEMPERATURE, case	-55 to 125°C.

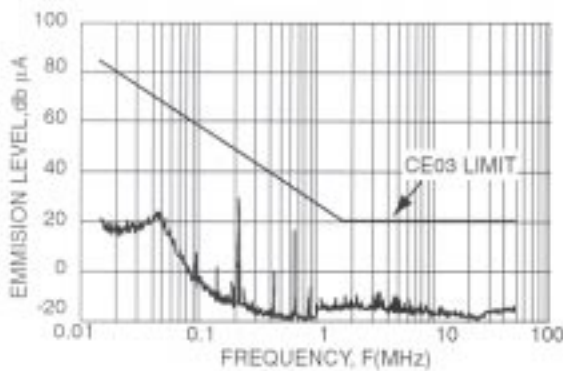
SPECIFICATIONS

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
INPUT VOLTAGE	STEADY STATE	0	28	40	V
INPUT VOLTAGE	TRANSIENT 50 μ sec. MAX			50	V
INPUT CURRENT	DC			5.5	A
OUTPUT VOLTAGE	STEADY STATE		$V_{out} = V_{in} - \ln(RDC)$		Vdc
OUTPUT CURRENT	RIPPLE			0.3	A rms
OUTPUT CURRENT	STEADY STATE			5.5	A
DC RESISTANCE (Rdc)	T = 25°C		0.20	0.35	Ohms
NOISE REDUCTION	200 Khz	35	40		db
NOISE REDUCTION	500 Khz	50	60		db
CAPACITANCE	ANY PIN TO CASE			4.7	μ F
ISOLATION	ANY PIN TO CASE, 500 Vdc	100			MOhm
OPERATING TEMPERATURE RANGE	CASE BASEPLATE	-55		+125	°C
STORAGE TEMPERATURE RANGE	CASE BASEPLATE	-65		+150	°C

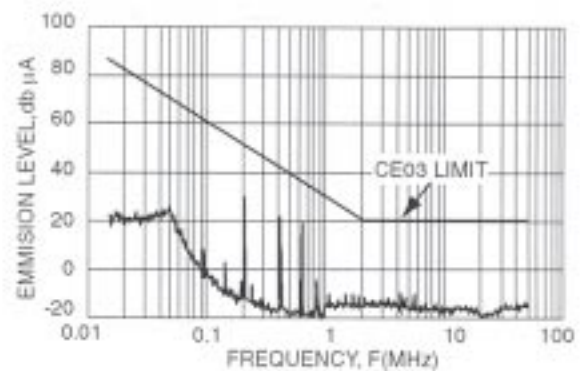
- NOTES: 1. Tcase= 25°C unless otherwise specified.
2. Longterm operation at the maximum temperature will result in reduced product life. Derate internal power dissipation to achieve high MTTF.

TYPICAL PERFORMANCE GRAPHS

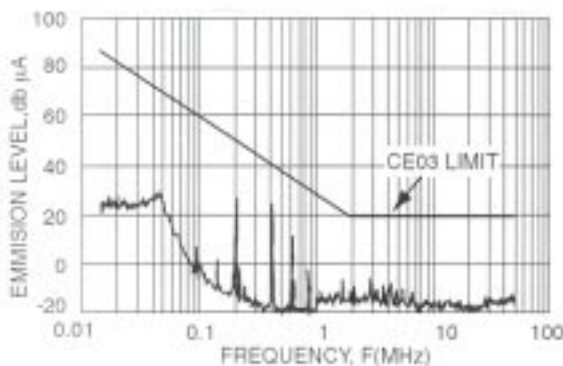
BBF2803S CONVERTER WITH BFL2805 FILTER



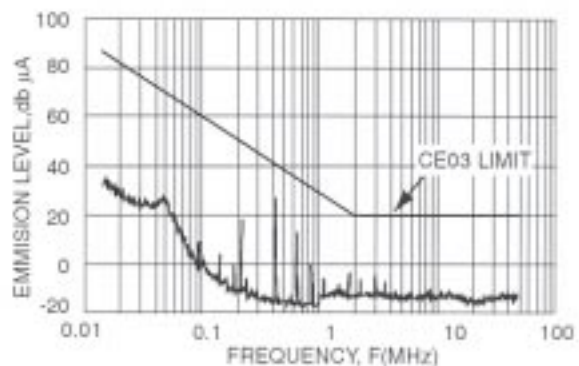
BBF2805S CONVERTER WITH BFL2805 FILTER



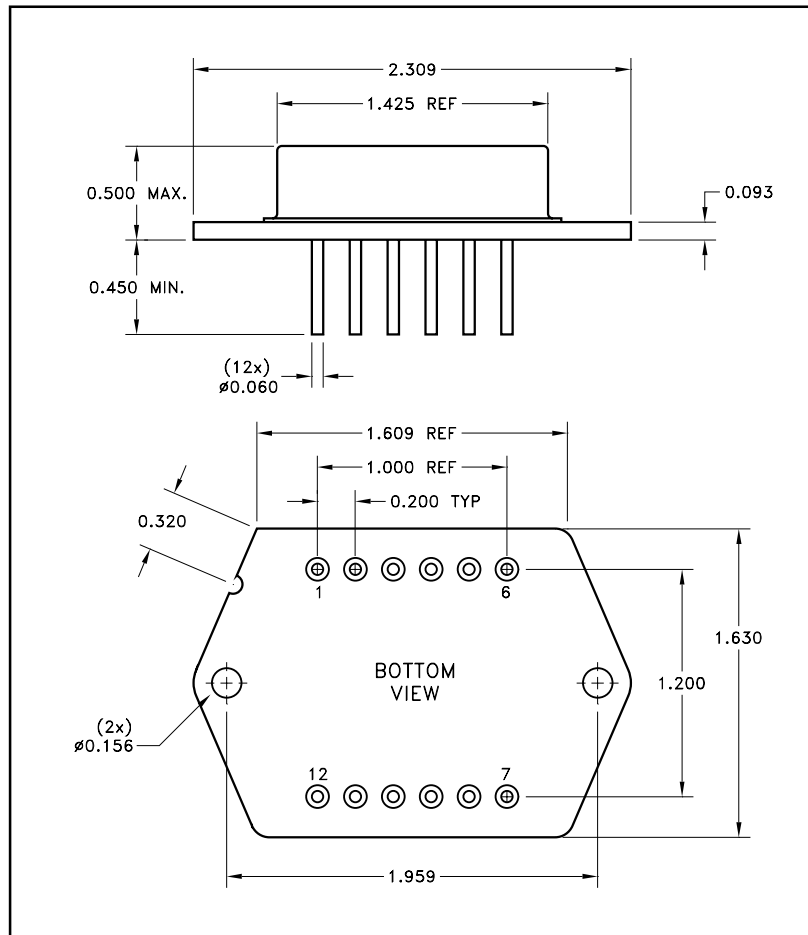
BBF2812S CONVERTER WITH BFL2805 FILTER



BBF2815S CONVERTER WITH BFL2805 FILTER



MECHANICAL SPECIFICATIONS



NOTE: ALL DIMENSIONS ARE ± 0.010 INCHES UNLESS OTHERWISE LABELED.
ESD Triangle indicates Pin 1.

ORDERING INFORMATION

BFL2805

SCREENING

BLANK = INDUSTRIAL; E = EXTENDED RELIABILITY;
H = CLASS H; K = CLASS K

OUTPUT CURRENT

05 = 5 AMP

NOMINAL INPUT VOLTAGE

GENERAL PART NUMBER

The above example is an industrial grade 5 Amp EMI Filter

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