

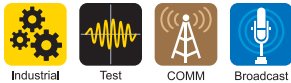
## 66W, 12A Non-isolated SMT Point Of Load

### Features

- ◆ DOSA Compatible Footprint
- ◆ Surface Mountable
- ◆ Constant Switching Frequency
- ◆ Edge Plated Castellations (EPC)
  - Inspectable Solder Joints
- ◆ No external loop tuning components needed
- ◆ Excellent Transient Response



### Key Market Segments & Applications



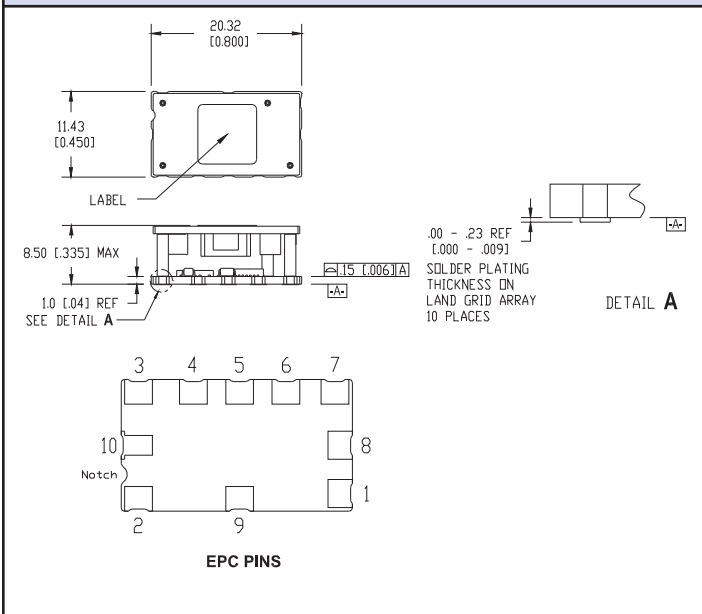
| Specifications            |          |  |                  |
|---------------------------|----------|--|------------------|
| Model                     |          | iBF05  | iBF12            |
| DC Output Voltage         | V        | 0.6 - 3.63   | 0.7 - 5.5        |
| DC Input Voltage          | V        | 2.4 - 5.5  | 4.5 - 14         |
| Efficiency                | %        | 84 - 93  | 83 - 94.5        |
| Output Voltage Tolerance  | %        | ±3   |                  |
| Switching Frequency       | kHz      | 600  |                  |
| Line Regulation           | mV       | 3  | 6                |
| Load Regulation           | mV       | 4  | 5                |
| External Load Capacitance | uF       | 188 - 1800   | 100 - 1500       |
| Output Ripple and Noise   | mVpp     | 20   | 30               |
| Overcurrent Protection    | A        | Hiccup Type  |                  |
| Remote On / Off           | -        | Negative Logic (For Positive Logic Contact Factory)                      |                  |
| Remote Sense              | -        | (+ Sense, compensating up to 0.5V  |                  |
| Power Good                | -        | Not available  | Yes, Low on fail |
| Operating Temp            | °C       | -40 to 115 (see thermal data on website)                                 |                  |
| Storage Temperature       | °C       | -55 to 125   |                  |
| Safety Agency Approvals   | -        | UL60950-1, CSA 22.2 No.60950-1-03; VDE CB scheme (IEC60950-1, EN60950-1) |                  |
| Weight                    | g / oz   | 5.5g / 0.194 oz  |                  |
| Size (LxWxH)              | mm / in. | 20.32 x 11.43 x 8.5 / 0.80 x 0.45 x 0.335                                |                  |
| Warranty                  | yrs      | 3 years  |                  |

## Model Selector

| Model               | Input Voltage (V) | Output Current (A) | Output Voltage (V) | Positive Logic On/Off | Negative Logic On/Off | Sequencing | Solder Bumping |
|---------------------|-------------------|--------------------|--------------------|-----------------------|-----------------------|------------|----------------|
| iBF05012A006V-003-R | 2.4 - 5.5         | 12                 | 0.6 - 3.63         | -                     | Yes                   | -          | EPC            |
| iBF05012A006V-007-R | 2.4 - 5.5         | 12                 | 0.6 - 3.63         | -                     | Yes                   | -          | LGA            |
| iBF12012A007V-001-R | 4.5 - 14          | 12                 | 0.7 - 5.5          | -                     | Yes                   | Yes        | EPC            |
| iBF12012A007V-003-R | 4.5 - 14          | 12                 | 0.7 - 5.5          | -                     | Yes                   | -          | EPC            |
| iBF12012A007V-007-R | 4.5 - 14          | 12                 | 0.7 - 5.5          | -                     | Yes                   | -          | LGA            |

## Preferred Model

## Outline Drawing (EPC Type)



## Pinout

| PIN | Function | PIN | Function  |
|-----|----------|-----|-----------|
| 1   | ON / OFF | 6   | VOUT      |
| 2   | VIN      | 7   | SENSE (+) |
| 3   | Reserved | 8   | Reserved  |
| 4   | GND      | 9   | PWR GOOD  |
| 5   | TRIM     | 10  | Reserved  |

## Other Industrial Products

|               |  |
|---------------|--|
| CC-E          | 1.5 - 30W 5, 12, 24 or 48V input isolated DC-DC converters |
| PX            | 10 - 60W 12, 24 or 48V input isolated DC-DC converters     |
| iAF, iCF, iCG | 3 - 20A DOSA2 non isolated DC-DC converters                |

For Additional Information, please visit [us.tdk-lambda.com/lp/products/ibf-series.htm](http://us.tdk-lambda.com/lp/products/ibf-series.htm)



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