

PRM Series

120 - 240 W DC/DC PRE-REGULATOR MODULE PRELIMINARY

Features

- ZVS buck / boost regulator.
- Small footprint: 1.1in² (7.1cm²).
- Provides factorised bus for 48 Vin VTMs.
- Available in 24 and 48V models.
- J-Lead package.
- Efficiency: Up to 97%.
- Pick & place / SMD compatible.
- High density: Up to 875W/in³.



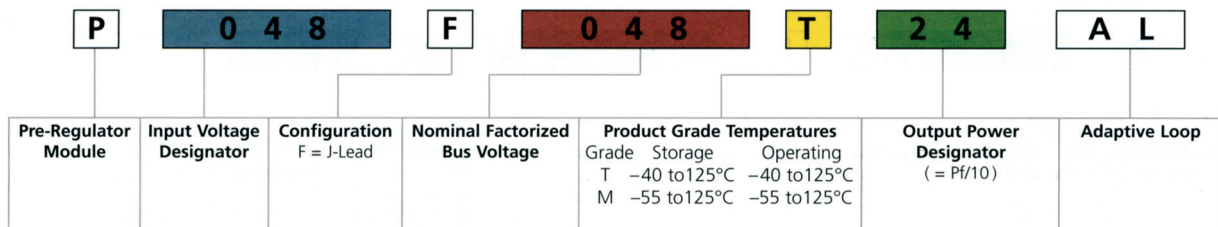
Pre-Regulator Module (PRM)

PRODUCT DESCRIPTION

The V•I Chip Pre-Regulator Module (PRM) 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 V•I Chip Voltage Transformation Modules (VTMs)— fast, efficient, isolated low noise Point-of-Load (POL) converters.

PRMs feature a unique "Adaptive Loop" compensation feedback: a single wire alternative to traditional remote sensing and feedback loops that enables precise control of an isolated POL voltage without the need for either a direct connection to the POL or for noise sensitive, bandwidth limiting, isolation devices in the feedback path.

Part Numbering



| Input Voltage | Max Output | | PRM Model No | Trim / Vf Range |
|---------------|------------|---------|---------------|-----------------|
| | Power | Current | | |
| 36 – 75 Vdc | 240 W | 5.0 A | P048F048T24AL | 26 – 55 V |
| | 120 W | 4.2 A | P048F048T12AL | |
| 38 – 55 Vdc | 170 W | 3.5 A | P045F048T17AL | |
| 18 – 36 Vdc | 120 W | 2.5 A | P024F048T12AL | |

Application Examples

