Products & Services

Applications

\_\_\_ Ordering

Company

Partners

Support

## **POWER MANAGEMENT**

- ► Drivers, High-Side
- ► FET Drivers, Low-Side
- ► Linear Regulators
- ► LED Drivers
- ▶ Motor and Fan Controllers
- ► Resonant Mode (LLC) Controllers
- ► Solar Bypass Devices
- Supervisory Circuits and Voltage References
- ► Switching Regulators
- ► Reverse Power Feed (RPF)
  - ► RPF Powered Device (PD) for Distribution Point Units (DPUs)
  - ► RPF Power Sourcing Equipment (PSE) for Customer Premises Equipments (CPEs)
    - PD81001
    - PD81101
    - PD81000
- ► Legacy Power Management
- ► Smart E-Fuse Devices
- ▶ Space-grade Power Management



Home / Power Management / Reverse Power Feed (RPF)

/ RPF Power Sourcing Equipment (PSE) for Customer Premises Equipments (CPEs) / PD81001 / PD81001ILQ-TR

## PD81001ILQ-TR

**Product Status** 

Sampling

Overview Applications Resources Ordering Support

Microsemi's PD81001 is a single port, mixed-signal, high-voltage Power Sourcing Equipment (PSE) driver. The device is utilized in FTTdp Home Gateways, Modems and Routers and enables Reverse Power Feeding to the Distribution Point Unit (DPU) on the same data line connecting between DPU and Customer Premise Equipment (CPE). It enables detection of compliant Powered Devices (PDs), thus, ensuring safe power feeding and disconnection of ports with minimum of external components. Integrating power, analog and state of the art logic, the PD81001 device fits into a single 24 pin, plastic QFN package.

## Features

- PD81001 is RPF PSE chip with integrated low Rdson FET
- Only 10 external components with built in 3.3VDC output
- $\bullet~$  Supports 10, 15 and 21W RPF classes with single DC voltage input (32-57 VDC)
- Provides PD protection such as over load, under load, over voltage, over temperature and short circuiting
- Inherent phone off-hook protection during Start-up
- PSE line monitoring capability through SPI



KOIII

Package Tape & Reel

Carrier:

Electrical Rating	Symbol	Min	Тур	Max	Unit
Number of Channels	# of Ch.			1	channels
Environmental Rating	Symbol	Min	Тур	Max	Unit
Operating Temperature	TA			70	°C

This part can be found in the following product categories:

- Power Management > Reverse Power Feed (RPF) > RPF Power Sourcing Equipment (PSE) for Customer Premises Equipments (CPEs) > PD81001
- Power Management Reverse Power Feed (RPF)

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