

Features

- Low profile 4.0mm
- Low cost
- Wide input range (5V - 36V)
- Short circuit protection
- Casellated connections

ROF-78E

Non Isolated Power Module

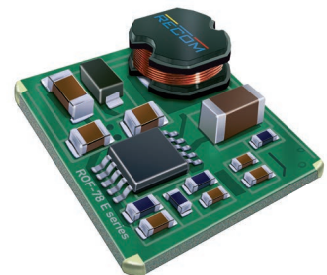


Description

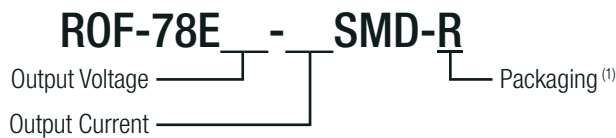
The ROF-78E is a switching regulator with a wide input voltage range, high efficiency and a low profile, pin-less SMD package. Two low-ripple output voltages are available as standard: 3.3V or 5V with 500mA continuous output current rating over the full operating temperature range of -40°C to +75°C without derating. An enable connection allows power sequencing or very low standby consumption (3.5µA) for battery powered applications. These modules can be SMD reflow soldered. The connection pads have corner half-vias to enable optical inspection of the joints after soldering.

Selection Guide

Part Number	Input Voltage Range [VDC]	Output Voltage [VDC]	Output Current [mA]	Efficiency typ. [%]
ROF-78E3.3-0.5SMD-R	5 - 36	3.3	500	73 - 84
ROF-78E5.0-0.5SMD-R	9 - 36	5.0	500	79 - 87



Model Numbering



Notes:

Note1: suffix -R for tape&reel packaging

Ordering Examples:

ROF-78E3.3-0.5SMD-R = 3.3Vout, 0.5A Output Current, SMD, tape and reel packaging

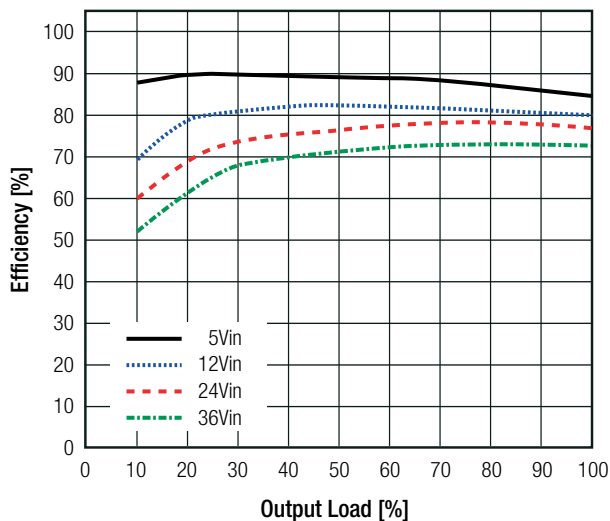
Specifications (measured @ Ta= 25°C, nom. Vin, full load and after warm-up unless otherwise stated)

BASIC CHARACTERISTICS

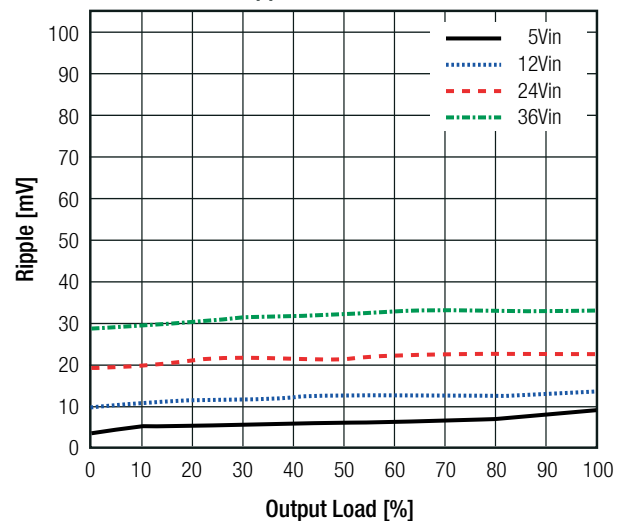
Parameter	Condition		Min.	Typ.	Max.
Input Voltage Range	nom. Vin= 12VDC and 24VDC		5VDC		36VDC
Input Current					500mA
Quiescent Current					5mA
Minimum Load ⁽²⁾			10%		
ON/OFF CTRL	max. Vin= 5VDC	DC-DC ON DC-DC OFF	Open or >1.75VDC GND or <0.7VDC		
Standby Current	DC-DC OFF			3.5μA	6.5μA
Internal Operating Frequency				650kHz	
Output Ripple and Noise	20MHz BW				100mVp-p

ROF-78E3.3-0.5SMD

Efficiency vs. Load

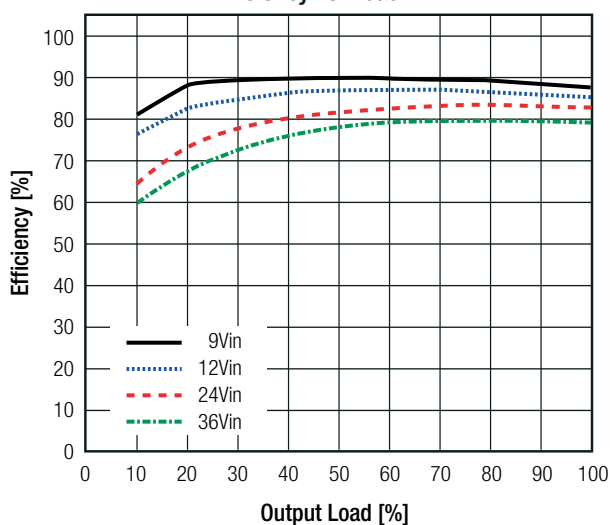


Ripple vs. Load



ROF-78E5.0-0.5SMD

Efficiency vs. Load



Ripple vs. Load

