

Wissel Engineering Power Products

Pocket Power P/N 16001300 35V DV 1.5A Buck Regulator

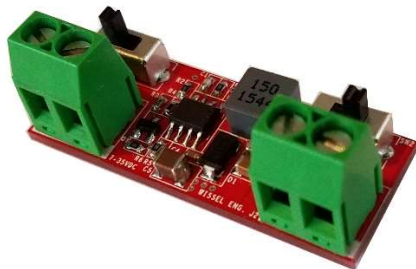
Features

- Selectable 3.3V or 5V Output
- On/Off Control Switch
- Wide 7-35V Operating Input Range
- 500kHz Fixed Switching Frequency
- Integrated Soft-Start
- Automatic Thermal Shutdown
- Up to 90% Efficiency
- Screw Terminals For Input and Output
- Small Package
- Integrated Reverse Polarity Protection

Applications

- On-the-Go Power Regulation
- Cheap Bench Solution
- Field Testing

Typical Application



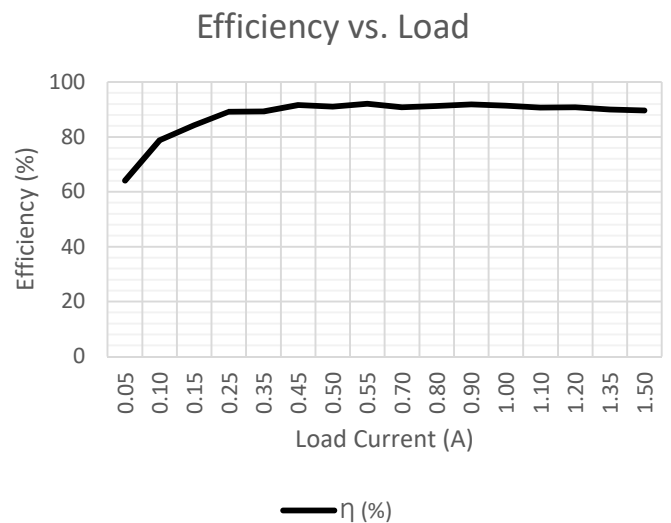
Description

Pocket Power is a portable high frequency, asynchronous step down Buck switching regulator that utilizes IC MP2467. Pocket Power has a wide operating voltage range and is capable of delivering 1.5A+ output current.

The wide input voltage range and convenient screw terminals makes it ideal for both On-the-Go and bench power regulation.

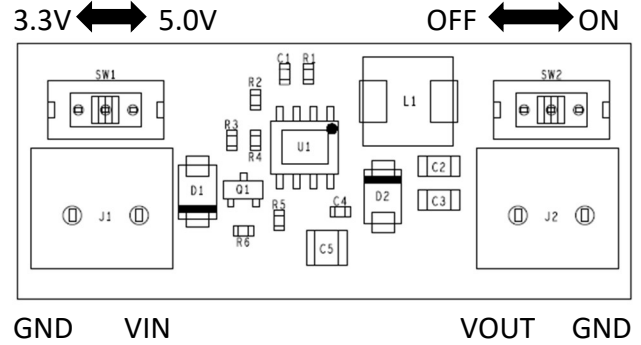
Integrated thermal shutdown and reverse polarity protection allow for a robust, powerful system that is tolerant of electrical environments outside of its normal operating range.

$V_{IN} = 12VDC$, SW2 = ON, $T_A = 25^{\circ}C$, SW = 5V



Absolute Maximum Ratings

Supply Voltage (V_{IN}).....-0.3V to 40V
 Output Current (I_{OUT}).....2.5A
 IC Junction Temp.....150°C
 Storage Temp.....-65°C to 150°C

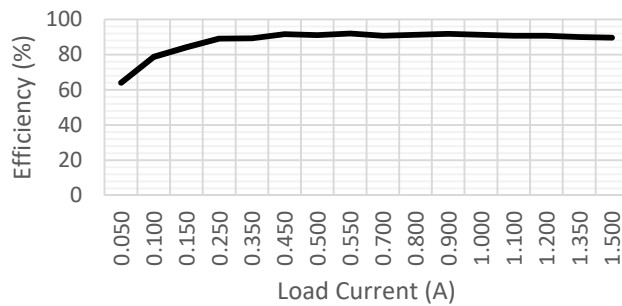


Electrical Characteristics

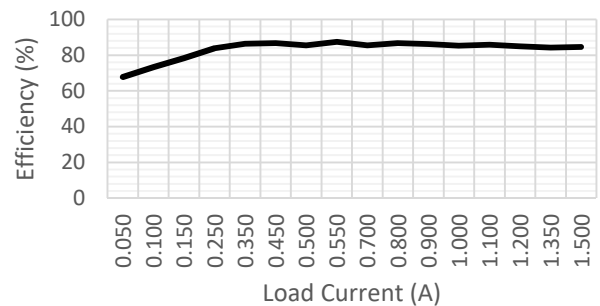
$V_{IN} = 12V$, Enable = ON, $T_A = 25^\circ C$, $V_{OUT} = 5.0V$

Parameter	Symbol	Condition	Min	Typ	Max	Units
Input Voltage	V_{IN}		7		35	V
Output Current	I_{OUT}		-	-	1.5	A
Output Voltage	V_{OUT}	SW1 = 3.3V, $I_{OUT} < 1.5A$	3.29	3.293	3.299	V
Output Voltage	V_{OUT}	SW1 = 5.0V, $I_{OUT} < 1.5A$	4.976	4.971	4.978	V
VIN UVLO Threshold			2.7	3.0	3.3	V
VIN UVLO Hysteresis			-	.35	-	V
Soft Start Time		$0V < V_{FB} < 0.8V$	-	1.5	-	ms
Thermal Shutdown			-	150		°C
Thermal Shutdown Hysteresis			-	15	-	°C

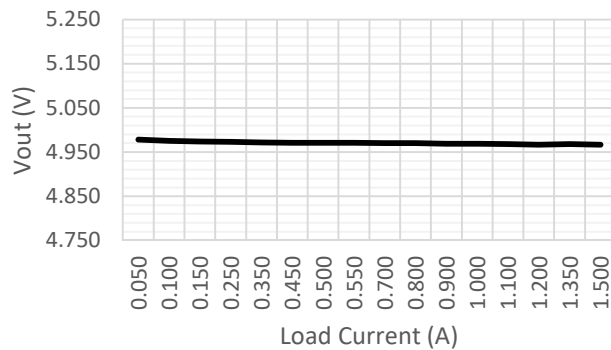
Efficiency vs. Load (SW1 = 5V)



Efficiency vs. Load (SW1 = 3.3V)



Vout vs. Load (SW1 = 5V)



Vout vs. Load (SW1 = 3.3V)

