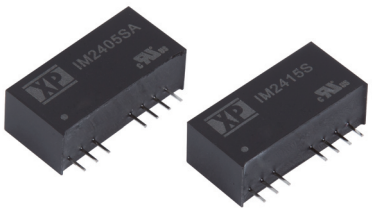
2 Watts
IM Series



- Regulated Single & Dual Output
- Wide 4:1 Input Range
- SIP Package
- 1500 VDC Isolation
- UL Approved
- Remote On/Off
- Continuous Short Circuit Protection
- 3 Year Warranty

Specification

Input

Input Voltage Range	• See table
Input Reflected Ripple Current	• 20 mA pk-pk through 12 µH inductor and 47 µF capacitor, 5 Hz to 20 MHz
Input Filter	• Capacitor
Input Surge	• 24 V models: 50 VDC for 100 ms 48 V models: 100 VDC for 100 ms

Output

Output Voltage	• See table
Minimum Load	• None[1]
Line Regulation	• ±0.5% max
Load Regulation	• ±0.5% max from 10-100% load[1]
Setpoint Accuracy	• ±1% max
Ripple & Noise	• 50 mV pk-pk max, 20 MHz bandwidth
Short Circuit Protection	• Continuous with auto recovery (foldback)
Cross Regulation	• ±5% on dual output models[2]
Remote On/Off	• On: Pin floating or pulled to -Vin Off: Pin driven to +2.7 to 15 VDC with respect to -Vin Vmax: 15 Vdc
Temperature Coefficient	• 0.02%/C

General

Efficiency	• See table
Isolation Voltage	• 1500 VDC
Isolation Resistance	• 10^9 Ω
Isolation Capacitance	• 500 pF max
Switching Frequency	• 250 kHz typical
MTBF	• >1.2 MHrs to MIL-HDBK-217F at 25 °C, GB

Environmental

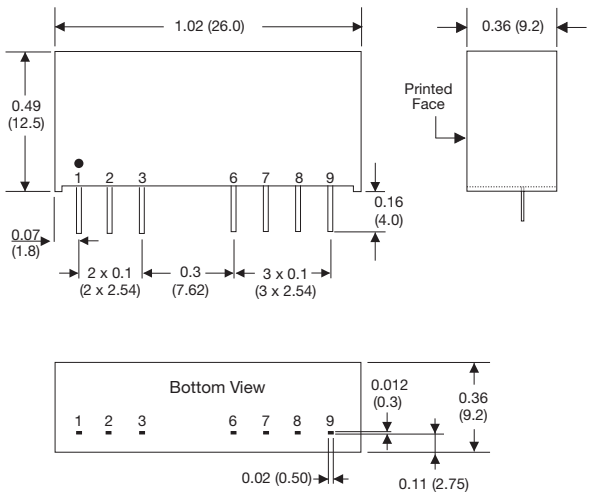
Operating Temperature	• -40 °C to +100 °C, derate from 100% load at 75 °C to 0% load at 100 °C
Storage Temperature	• -40 °C to +125 °C
Case Temperature	• 100 °C max
Cooling	• Convection-cooled

Safety

Safety Approvals	• UL60950-1, CAN/CSA C22.2 No.60950-1, UL62368-1, CE (Meets all applicable directives), UKCA (Meets all applicable legislation

Input Voltage	Output Voltage	Output Current	No Load Input Current[3]	Max Capacitive Load	Efficiency	Model Number
9.0-36.0 V	3.3 V	500 mA	10 mA	2200 µF	75%	IM2403SA
	5.0 V	400 mA	10 mA	1000 µF	81%	IM2405SA
	12.0 V	165 mA	10 mA	165 µF	84%	IM2412SA
	15.0 V	135 mA	10 mA	100 µF	85%	IM2415SA
	±5.0 V	±200 mA	10 mA	±470 µF	81%	IM2405S
	±12.0 V	±85 mA	10 mA	±100 µF	83%	IM2412S
	±15.0 V	±65 mA	10 mA	±47 µF	82%	IM2415S
18.0-75.0 V	3.3 V	500 mA	5 mA	2200 µF	75%	IM4803SA
	5.0 V	400 mA	5 mA	1000 µF	80%	IM4805SA
	12.0 V	165 mA	5 mA	165 µF	84%	IM4812SA
	15.0 V	135 mA	5 mA	100 µF	84%	IM4815SA
	±5.0 V	±200 mA	5 mA	±470 µF	80%	IM4805S
	±12.0 V	±85 mA	5 mA	±100 µF	81%	IM4812S
	±15.0 V	±65 mA	5 mA	±47 µF	84%	IM4815S

Mechanical Details



PIN CONNECTIONS					
Pin	Single	Dual	Pin	Single	Dual
1	-V Input	-V Input	7	N.C.	Common
2	+V Input	+V Input	8	N.C.	N.C.
3	Remote On/Off	Remote On/Off	9	-V Output	-V Output
6	+V Output	+V Output			

Notes

1. Operation at no load will not damage the converter but may not meet all specifications.
2. When one output is set to 100% load and the other varies between 25%-100% load.
3. Input current measured at nominal input voltage
4. Pin pitch tolerance: ±0.014 (±0.35)
5. Case tolerance: ±0.02 (±0.5)
6. Weight: 0.014 lbs (6.5 g)