



Input voltage range up to 72 VDC  
1, 2 and 3 outputs up to 30 VDC  
500 VDC I/O electric strength test voltage

- Low cost
- Short circuit proof
- Efficiency up to 82%

**Model Selection**

Output 1		Output 2		Output 3		Type	Type	Type
$V_{O\ nom}$	$I_{O\ nom}$	$V_{O\ nom}$	$I_{O\ nom}$	$V_{O\ nom}$	$I_{O\ nom}$	Input voltage <sup>1</sup>	Input voltage	Input voltage
[VDC]	[mA]	[VDC]	[mA]	[VDC]	[mA]	9 - 18 VDC	18 - 36 VDC	36 - 72 VDC
3.3	1500	-	-	-	-	12 IMR 6-03-2	24 IMR 6-03-2	48 IMR 6-03-2
3.3	3000	-	-	-	-	12 IMR 15-03-2	24 IMR 15-03-2	48 IMR 15-03-2
5	500	-	-	-	-	12 IMR 3-05-2	24 IMR 3-05-2	48 IMR 3-05-2
5	1000	-	-	-	-	12 IMR 6-05-2	24 IMR 6-05-2	48 IMR 6-05-2
5	3000	-	-	-	-	12 IMR 15-05-2	24 IMR 15-05-2	48 IMR 15-05-2
12	250	-	-	-	-	12 IMR 3-12-2	24 IMR 3-12-2	48 IMR 3-12-2
12	500	-	-	-	-	12 IMR 6-12-2	24 IMR 6-12-2	48 IMR 6-12-2
12	834	-	-	-	-	12 IMR 15-12-2	24 IMR 15-12-2	48 IMR 15-12-2
15	200	-	-	-	-	12 IMR 3-15-2	24 IMR 3-15-2	48 IMR 3-15-2
15	400	-	-	-	-	12 IMR 6-15-2	24 IMR 6-15-2	48 IMR 6-15-2
15	1000	-	-	-	-	12 IMR 15-15-2	24 IMR 15-15-2	48 IMR 15-15-2
+5	250	-5	250	-	-	12 IMR 3-0505-2	24 IMR 3-0505-2	48 IMR 3-0505-2
+5	500	-5	500	-	-	12 IMR 6-0505-2	24 IMR 6-0505-2	48 IMR 6-0505-2
+12	125	-12	125	-	-	12 IMR 3-1212-2	24 IMR 3-1212-2	48 IMR 3-1212-2
+12	250	-12	250	-	-	12 IMR 6-1212-2	24 IMR 6-1212-2	48 IMR 6-1212-2
+12	625	-12	625	-	-	12 IMR 15-1212-2	24 IMR 15-1212-2	48 IMR 15-1212-2
+15	100	-15	100	-	-	12 IMR 3-1515-2	24 IMR 3-1515-2	48 IMR 3-1515-2
+15	200	-15	200	-	-	12 IMR 6-1515-2	24 IMR 6-1515-2	48 IMR 6-1515-2
+15	500	-15	500	-	-	12 IMR 15-1515-2	24 IMR 15-1515-2	48 IMR 15-1515-2
5	2000	+12	200	-12	200	12 IMR 15-051212-2	24 IMR 15-051212-2	48 IMR 15-051212-2
5	2000	+15	200	-15	200	12 IMR 15-051515-2	24 IMR 15-051515-2	48 IMR 15-051515-2

<sup>1</sup> 12 IMR 3 and 12 IMR 15 types have reduced output currents of approx. 80%.

Model numbers highlighted in yellow or shaded are not recommended for new designs.

### Input

Input voltage	continuous range, 12 V	9 - 18 VDC
	continuous range, 24 V	18 - 36 VDC
	continuous range, 48 V	36 - 72 VDC
Protection	reverse input voltage, current limitation	

### Output

Efficiency		up to 82%
Minimum load	recommended	20% $I_{o\ nom}$
Line regulation	$V_{i\ min} - V_{i\ max}, I_{o\ nom}$	$\pm 1\%$
Load regulation	$V_{i\ nom}, 0 - 100\% I_{o\ nom}$ , single output models	2%
	dual output models (tracing)	5%
	triple output models (tracing)	6%
Ripple and noise	$V_{i\ nom}, (20 - 100\%) I_{o\ nom}$	2% $V_{o\ nom}$

### Protection

Overload protection	$V_{i\ nom}$ , full load	125% $P_{i\ nom}$
No-load protection		

### Safety

I/O electric strength test	per EN 60950	500 VDC
Electromagnetic interference	conducted per EN 55022 with external filter	class B

### Environmental

Operating temperature	$V_{i\ nom}, I_{o\ nom}$	-10 to 50°C
Storage temperature	non operational	-40 to 100°C
Relative humidity	non condensing	95%
MTBF	per MIL-HDBK-217F, N2	>3'000'000 h

### Options

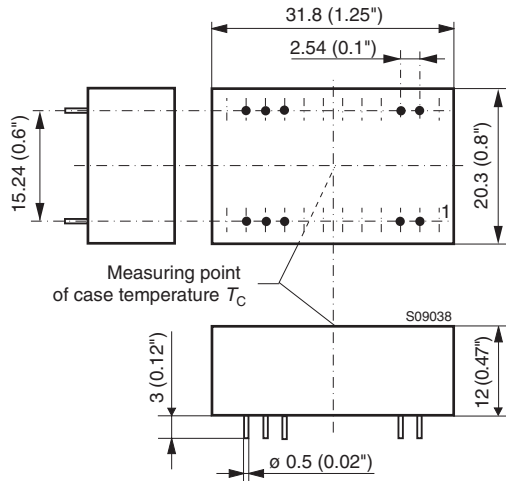
Extended temperature range	-25 to 71°C, ambient, operating, IMR 3, IMR 6	-7
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**Mechanical data**

Tolerances  $\pm 0.3$  mm (0.012") unless otherwise indicated.



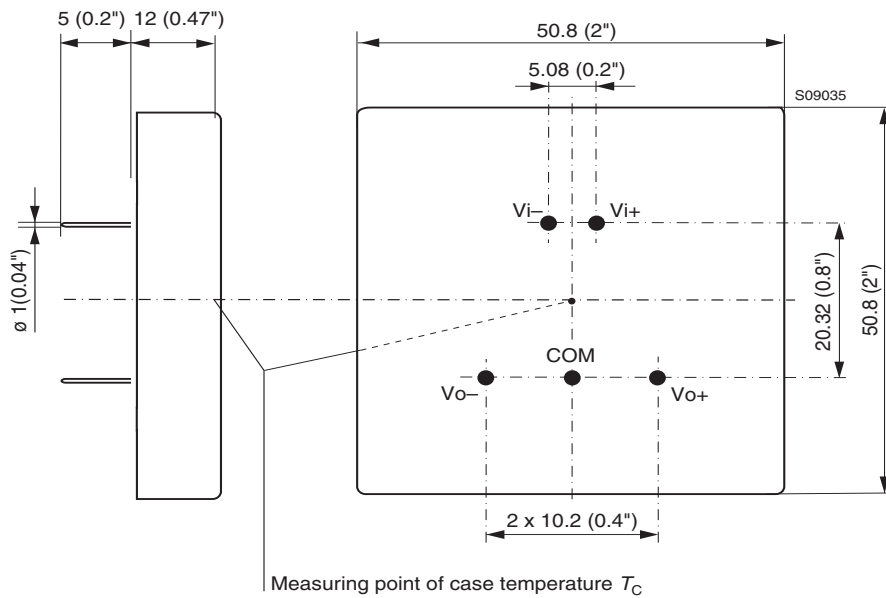
**IMR 3**



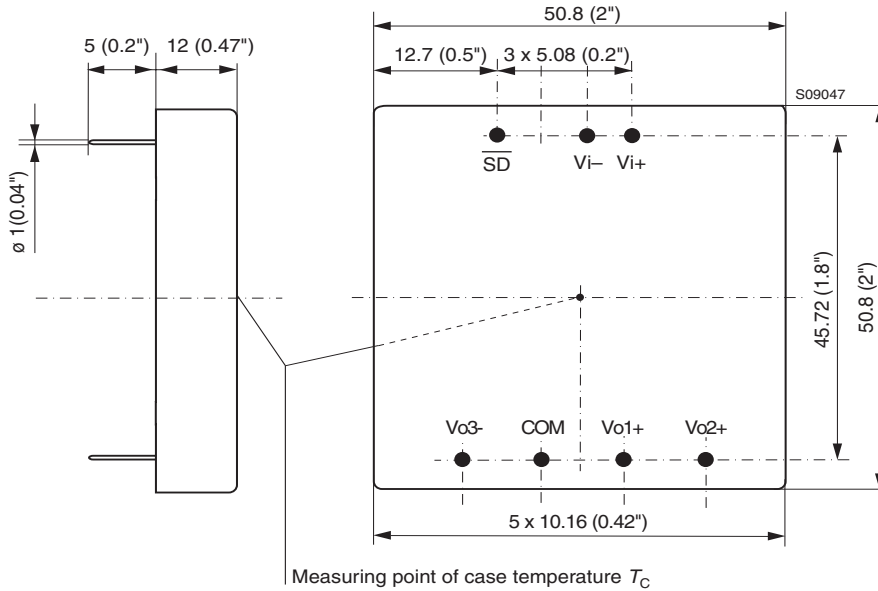
**Pin allocation IMR 3**

Pin	Single output unit	Dual output unit
2	Vi-	Vi-
3	Vi-	Vi-
9	n.c.	COM
11	n.c.	Vo-
14	Vo+	Vo+
16	Vo-	COM
22	Vi+	Vi+
23	Vi+	Vi+

**IMR 6/IMR 15 Single and Dual Output**



**IMR 15 Triple Output**



**Accessories**

DIN and chassis mounting bracket.

NUCLEAR AND MEDICAL APPLICATIONS - Power-One products are not authorized for use as critical components in life support systems, equipment used in hazardous environments, or nuclear control systems without the express written consent of the respective divisional president of Power-One, Inc.

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