

IRM-60-12ST

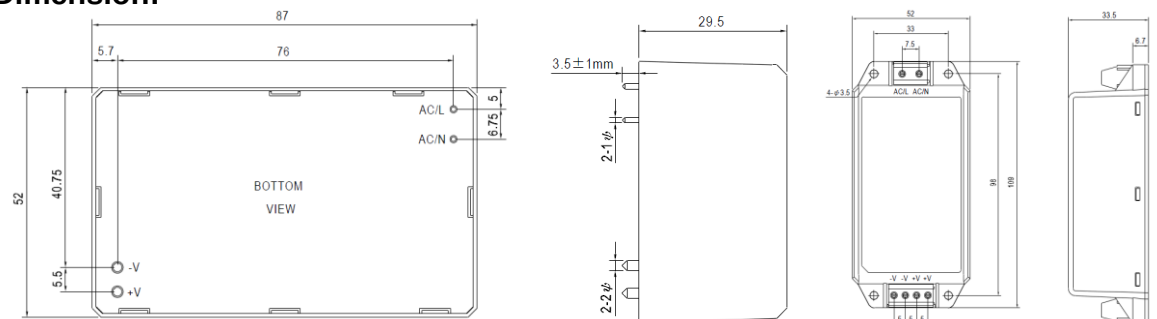
60W miniature AC-DC module-type power supply



IRM-60-12ST is a 60W miniature (87*52*29.5mm) AC-DC module-type power supply, ready to be soldered onto the PCB boards of various kinds of electronic instruments or industrial automation equipment. This product allows the universal input voltage range of 85~264VAC. The 94V-0 flame retardant plastic case and the fully-potted silicone enhance the heat dissipation and meet the anti-vibration demand up to 5G; moreover, it provides the fundamental resistance to dust and moisture.

- ▶ Universal AC input / Full range
- ▶ Compact size (87*52*29.5mm)
- ▶ Protections: Short circuit / Overload / Over voltage
- ▶ Cooling by free air convection
- ▶ 100% full load burn-in test
- ▶ High reliability

Dimension:



Technical Specifications

60W miniature AC-DC module-type power supply

Model#
IRM-60-12ST

Output	
DC voltage	12V
Rated current	5A
Current range	0~5A
Rated power	60W
Ripple & noise (max.)	120m Vp-p
Voltage Tolerance	±2.5%
Line regulation	±0.5%
Load regulation	±1.0%
Setup, rise time	1000ms, 30ms/230VAC 2000ms, 30ms/115VAC at full load
Hold up time	50ms/230VAC 12ms/115VAC at full load

Input	
Voltage range	85~264VAC
Frequency range	47~440Hz
Efficiency (Typ.)	87.5%
AC current (Typ.)	1.8A/115VAC 1A/230VAC
Inrush current (Typ.)	Cold start 30A/115VAC 60A/230VAC
Leakage current	< 0.25mA/240VAC

Protection	
Overload	115%~160% rated output power
	Protection type : Hiccup mode, recovers automatically after fault condition is removed
Over voltage	12.6~16.2V
	Protection type : Shut off o/p voltage, clamping by zener diode

Environment

Working temperature	-30~+70℃
Working humidity	20~90% RH non-condensing
Storage temp., humidity	-40~+85℃, 10 ~ 95% RH
Temp. coefficient	±0.03%/℃ (0 ~ 50℃)
Vibration	10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes

Safety & EMC

Safety standards	UL60950-1, TUV EN60950-1 approved
Withstand voltage	I/P-O/P:3KVAC
Isolation resistance	I/P-O/P:100M Ohms / 500VDC / 25℃ / 70% RH
EMC emission	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3
EMC immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, heavy industry level (surge L-N : 1KV), criteria A

Others

MTBF	1226Khrs min. MLK-HDBK-217F (25℃)
Dimension	PCB mounting style: 87*52*29.5mm (L*W*H) Screw terminal style: 109*52*33.5mm (L*W*H)
Packing	PCB mounting style: 0.23Kg;60pcs/14.8Kg/0.97CUFT Screw terminal style: 0.27Kg;50pcs/14.5Kg/ CUFT