

AC - DC Power Module



Features:

- AC/DC power module
- Universal input 85 to 265V AC
- High efficiency up to 79%
- Short circuit protection
- Internal input filter

Specifications:

All specifications typical at nominal line, full load, 25°C unless otherwise noticed

Characteristics	Conditions	Min.	Typ.	Max.	Unit
Switching frequency	Vi nominal, Io nominal	80	-	-	kHz
Isolation voltage	Input/output	3,000	-	-	V AC
Isolation resistance	Input/output, at 500V DC	100	-	-	MΩ
Ambient temperature	Operating at Vi nominal, Io nominal	-20	-	+71	°C
Case temperature		-	-	+85	-
Derating	Vi nominal, Io nominal +51 to +71°C	-	-	2	%/°C
Storage temperature	Non-operational	-40	-	+100	°C
MTBF	According to MIL-HDBK-217F, GF40	-	2,65,000	-	Hrs
Relative humidity	Vi nominal, Io nominal	-	-	95	% RH
Dimension	(L) 58 x (W) 45 x (H) 18.5	-	-	-	mm
Cooling	Free air convection	-	-	-	-
Case material	Plastic	-	-	-	-

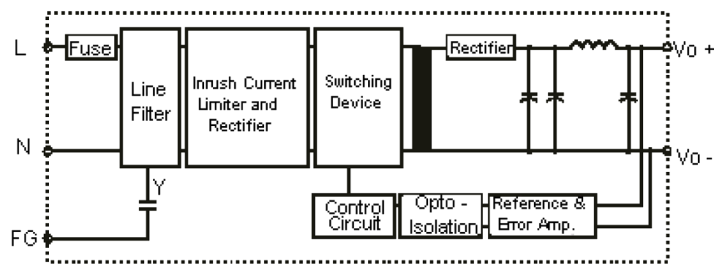
Input Specifications

Characteristics	Conditions		Minimum	Maximum	Unit
Rated input voltage	Io nominal		85	240	V AC
Input voltage range	Io nominal	AC in		265	
		DC in	120	370	V DC
Line frequency	Vi nominal, Io nominal		47	63	Hz
Inrush current	Io nominal	Vi : 115V AC	-	10	A
		Vi : 230V AC	-	18	

Output Specifications

Characteristics	Conditions	Min.	Typ.	Max.	Unit
Output voltage accuracy	Vi nominal, Io nominal	-	-	±2	%
Minimum load	Vi nominal	single output models	0	-	
		dual output models (each output)	20	-	
Line regulation	Io nominal, Vi minimum to Vi maximum	-	-	±1	
Load regulation	Vi nominal, Io min. to Io nominal	single output models	-	±2	
		dual output models	-	±5	
Transient recovery time	Vi nominal, Io nominal = 1 ↔ 0.5 Io nominal	-	300	-	µS
Temperature coefficient	Vi nominal, Io nominal	-	-	±0.02	%/°C
Ripple and noise	Vi nominal, Io nominal, BW = 20MHz	Vout x ±1% p-p Max.			mV
Efficiency	Vi nominal, Io nominal, Po/Pi	Up to 79%			

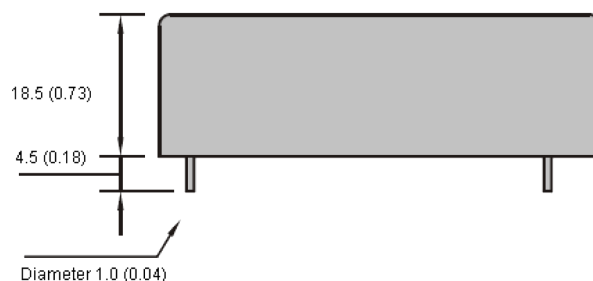
Block diagram for KAM07 series with single output



Control and Protection

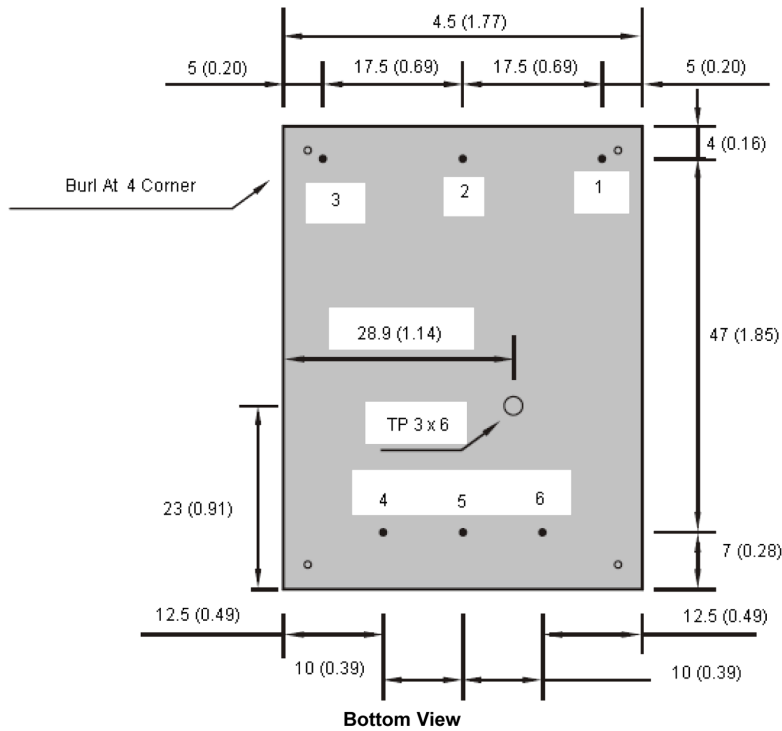
Input fuse	T2A/250V ac internal
Output short circuit	By current limited

Mechanism and Pin Configuration



Dimensions : Millimetres (Inches)

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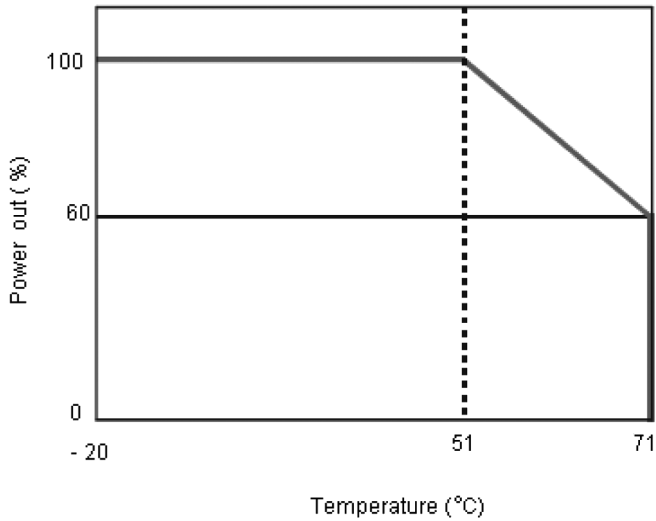
Physical Characteristics

Case size	58mm × 45mm × 18.5mm (2.28" × 1.77" × 0.73")
Case material	Plastic

General Pin Assignment

PIN Number	1	2	3	4	5	6
Single	Line	Neutral	F.G.	Vo-	No Pin	Vo+

Derating



Type	Input Voltage (V AC)	Output Wattage (W)	Output Voltage (V DC)	Output Current (mA)	EFF (Typical) (%)	EFF (Minimum) (%)
Single Output	85 to 265	7.5	+12	630	78	75

Part Number Table

Description	Part Number
PSU, Encapsulated, 7W, 12V	KAM0712

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