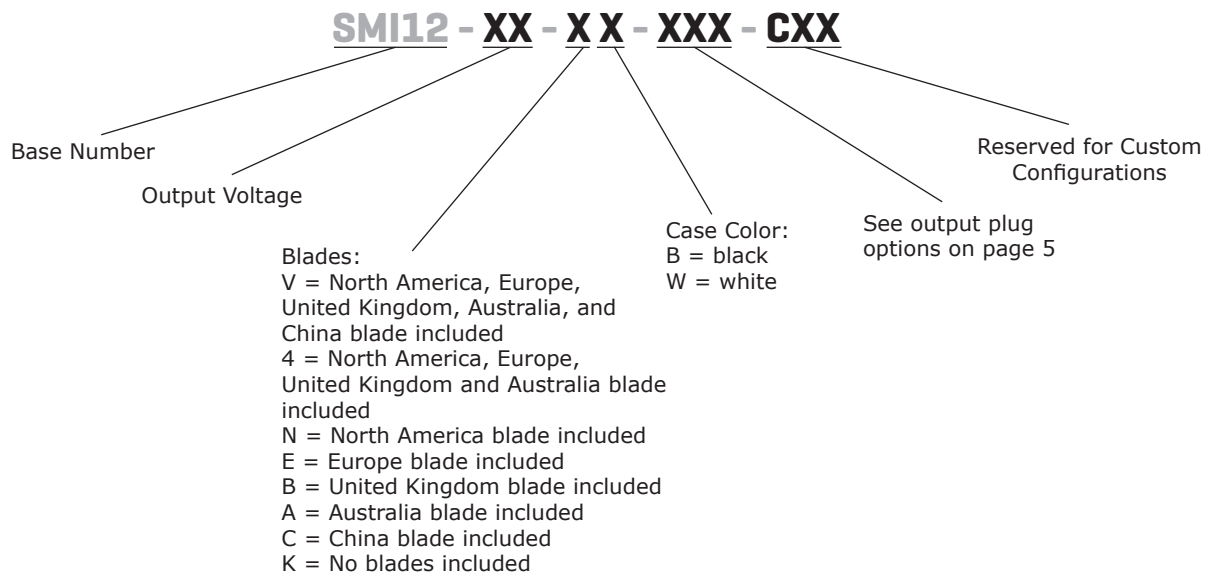


SERIES: SMI12 | DESCRIPTION: EXTERNAL AC-DC POWER SUPPLY
FEATURES

- up to 12 W continuous power
- DoE Level VI, CoC Tier 2 efficiency
- universal input voltage range
- interchangeable Ac blades for global use
- over voltage, over current, and short circuit protections
- UL/cUL, CE, PSE, RCM & FCC safety approvals
- IEC 62368 certified
- white and black case options



MODEL	output voltage	output current max	output power max	ripple and noise max	efficiency level ²
	(Vdc)	(A)	(W)	(mVp-p)	
SMI12-5	5	2	10	200	VI
SMI12-9	9	1.33	11.97	300	VI
SMI12-12	12	1	12	300	VI

PART NUMBER KEY


INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current				0.5	A
leakage current	at nominal ac input voltage and frequency			0.25	mA
no load power consumption				0.075	W

OUTPUT

parameter	conditions/description	min	typ	max	units
load regulation			5		%
start-up time	at nominal ac input voltage			3	s
rise time	at nominal input voltage			100	ms
hold-up time	at nominal input voltage	5			ms

PROTECTIONS

parameter	conditions/description	min	typ	max	units
short-circuit protection	auto recovery				
over-voltage protection				12	V
over-current protection	auto recovery			3	A

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	10mA for 1 minute	3,000			Vac
safety approvals	UL/cUL, CE, RCM & PSE, UKCA				
EMI/EMC	EN 55032:2015, EN 55034:2010+A1:2015, FCC				
MTBF	as per Telcordia SR-332, Issue 2 at 115/230 Vac, full load, 0~40°C	50,000			hours
RoHS	yes				

ENVIRONMENTAL

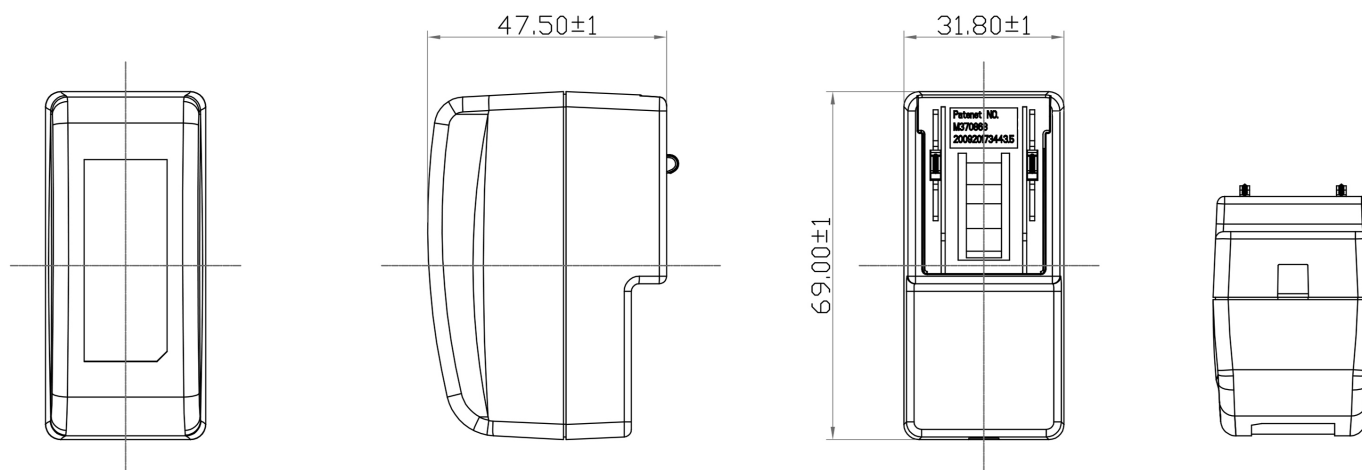
parameter	conditions/description	min	typ	max	units
operating temperature		-10		40	°C
storage temperature		-30		60	°C
operating humidity		20		85	%
storage humidity		5		95	%

MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	70 x 32.8 x 48.5				mm
inlet plug	multi-blade wall mount				
weight			89		g

MECHANICAL DRAWING

units: mm
tolerance: ± 1



INTERCHANGEABLE BLADES					
BLADE DESIGNATOR	N	E	B	A	C
REGION	North America	Europe	UK	Australia	China
BLADE ACCESSORY BLACK CASE	SMI-US-3L	SMI-EU-3L	SMI-UK-3L	SMI-AU-3L	SMI-CN-3L
BLADE ACCESSORY WHITE CASE	SMI-US-3L-W	SMI-EU-3L-W	SMI-UK-3L-W	SMI-AU-3L-W	SMI-CN-3L-W
BLADE					

DC CORD

units: mm

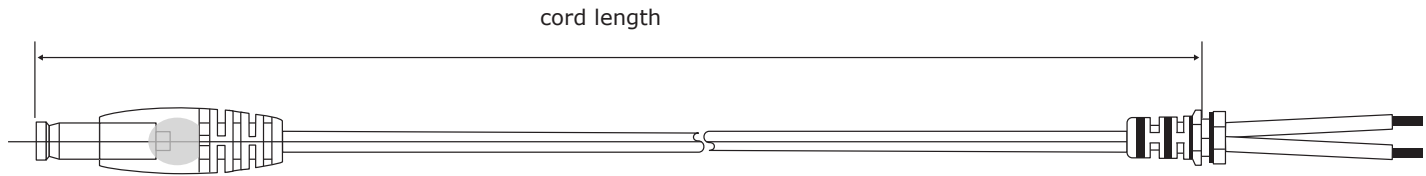


Table 1

MODEL NO.	CABLE	CORD LENGTH
SMI12-5	20 AWG/2C 2468	1,500 mm ±50
SMI12-9	22 AWG/2C 2468	1,500 mm ±50
SMI12-12	24 AWG/2C 2468	1,500 mm ±50

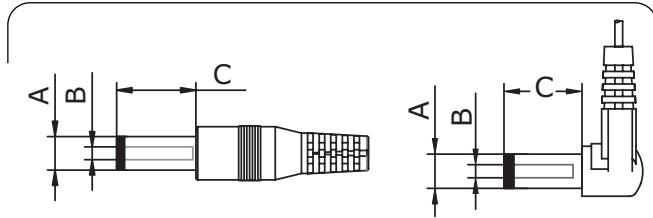
DC PLUG TYPE PART NUMBER KEY

XXX								
Plug Polarity:		Plug Code:			Plug Angle:			
P = Center Positive		X = Choose a code from the options below			"blank" = Straight			
N = Center Negative					R = Right Angle			
Plug Polarity		Code		Dimensions (mm)			Plug Angle	
Center Pos.	Center Neg.	Option	Type	A	B	C	Straight	Right
•	•	5	Standard	5.5	2.1	9.5	•	•
•	•	6	Standard	5.5	2.5	9.5	•	•
•	•	7	Standard	3.5	1.35	9.5	•	•
•	•	10	Locking	5.5	2.1	9.5	•	N/A
•	•	11	Locking	5.5	2.5	9.5	•	N/A
•	•	12	EIAJ-1	2.35	0.7	9.5	•	•
•	•	13	EIAJ-2	4.0	1.7	9.5	•	•
•	•	14	EIAJ-3	4.75	1.7	9.5	•	•
N/A	N/A	CUB	USB	USB Type C			•	N/A
N/A	N/A	MUB	USB	Micro USB Type B			•	N/A

Note: 1. Contact CUI for additional plug options

DC PLUG TYPE

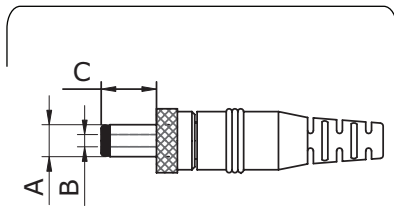
Standard



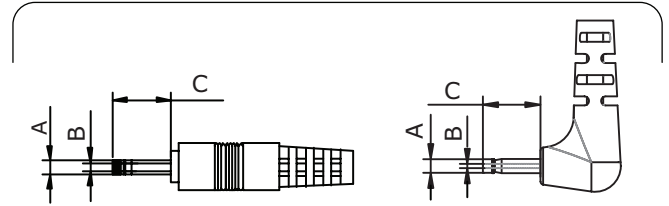
Straight

Right Angle (R)

Locking



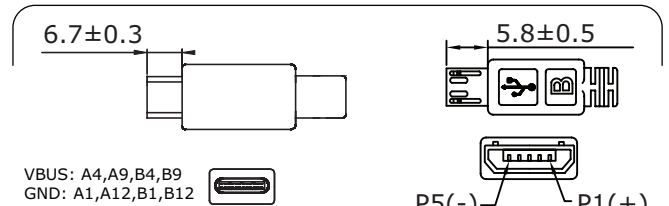
EIAJ



Straight

Right Angle (R)

USB

VBUS: A4, A9, B4, B9
GND: A1, A12, B1, B12

USB Type C

Micro USB Type B

REVISION HISTORY

rev.	description	date
1.0	initial release	07/09/2020
1.01	tolerance updated	01/12/2021
1.02	ac blades updated	08/10/2021
1.03	UKCA added to specification	08/12/2021

The revision history provided is for informational purposes only and is believed to be accurate.



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CUI offers a two (2) year limited warranty. Complete warranty information is listed on our website.

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Mouser Electronics

Authorized Distributor

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[SMI12-9-VB-CUB](#) [SMI12-9-VW-P5R](#)