



**INPUT**

parameter	conditions/description	min	typ	max	units
input voltage		4.5	5	5.5	Vdc
surge voltage	5 Vdc input, for maximum of 1 second	-0.7		9	Vdc
filter	capacitance filter				
current	full load/no load				
	3.3/5 Vdc output		270/5	286/10	mA
	9/12 Vdc output		241/12	254/20	mA
	15/24 Vdc output		241/18	254/30	mA

**OUTPUT**

parameter	conditions/description	min	typ	max	units
line regulation	Vin change $\pm 1\%$				
	3.3 Vdc output other outputs			1.5 1.2	%/% %/%
load regulation	10% ~ 100% load				
	3.3 Vdc output		15	20	%
	5 Vdc output		10	15	%
	9 Vdc output		8	10	%
	12 Vdc output		7	10	%
	15 Vdc output		6	10	%
	24 Vdc output		5	10	%
set-point accuracy	see regulation curve				
switching frequency	full load, nominal input		270		kHz
temperature coefficient	full load			$\pm 0.02$	%/°C

**PROTECTIONS**

parameter	conditions/description	min	typ	max	units
short circuit protection	Continuous, self-recovery				

## SAFETY AND COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input-output electric strength test for 1 minute	3000			Vdc
isolation resistance	input-output insulation at 500 Vdc	1000			MΩ
isolation capacitance	input-output capacitance at 100 KHz / 0.1 V		20		pF
safety approvals	UL62368/EN62368/IEC62368				
EMC	CISPR32/EN55032 Class B (see recommended circuit)				
ESD	IEC/EN61000-4-2, Air ±8kV, Contact ±4kV, perf. Criteria B				
RoHS	yes				
MTBF	MIL-HDBK-217F @ 25°C	3500			kHours

## ENVIRONMENTAL

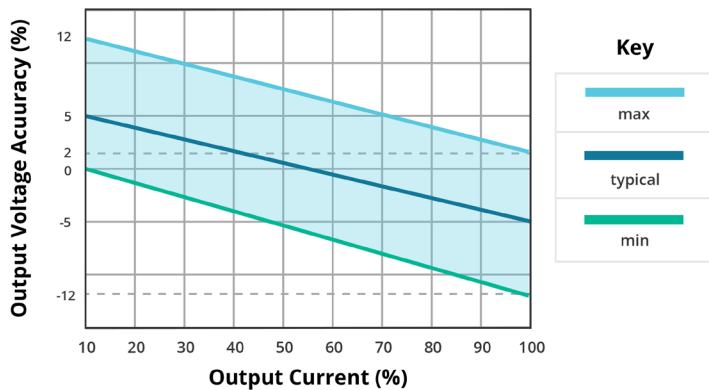
parameter	conditions/description	min	typ	max	units
operating temperature		-40		105	°C
storage temperature		-55		125	°C
humidity	non-condensing	5		95	%

## SOLDERABILITY

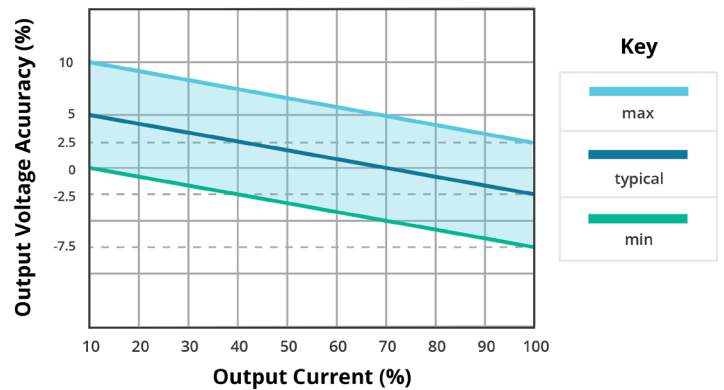
parameter	conditions/description	min	typ	max	units
reflow soldering	60 s max over 217°C			245	°C

## DERATING CURVE

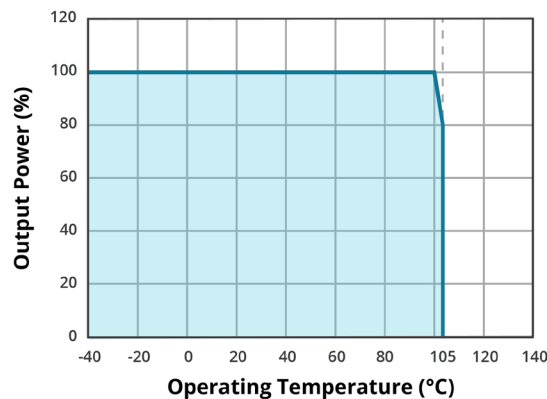
**OUTPUT REGULATION CURVE**  
3.3 Vdc output model  
(nominal input)



**OUTPUT REGULATION CURVE**  
all other output models  
(nominal input)



**TEMPERATURE DERATING CURVE**

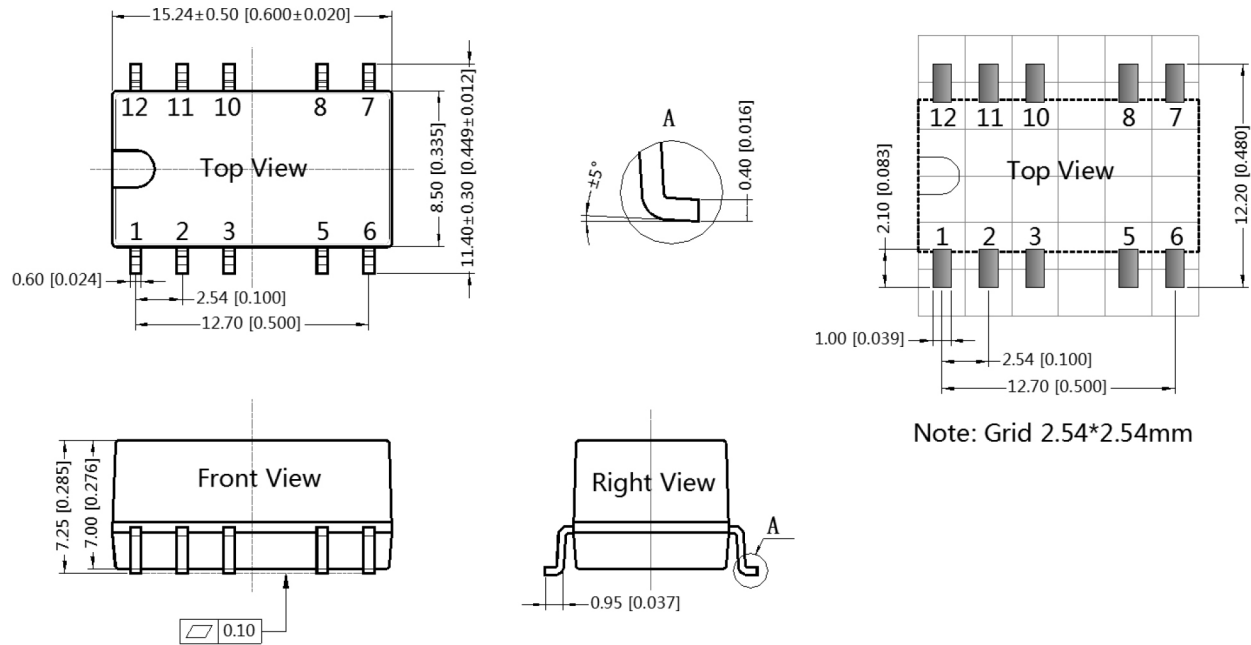


## MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	15.24 x 11.40 x 7.25				mm
case material	Black plastic; flame-retardant and heat-resistant (UL94-V0)				
weight			1.3		g

## MECHANICAL DRAWING

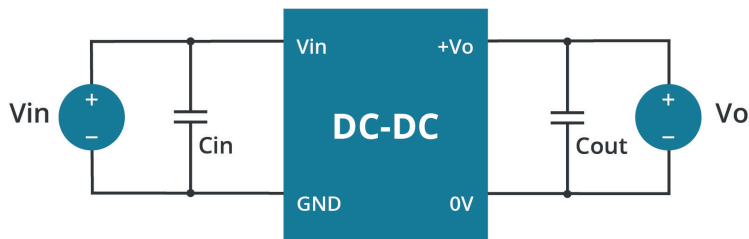
units: mm [inches]  
 tolerance:  $\pm 0.25$  [ $\pm 0.010$ ]



PIN CONNECTIONS		
PIN	Single	Dual
1	GND	GND
2	Vin	Vin
5	0V	0V
6	NC	-Vo
8	+Vo	+Vo
other	NC	NC

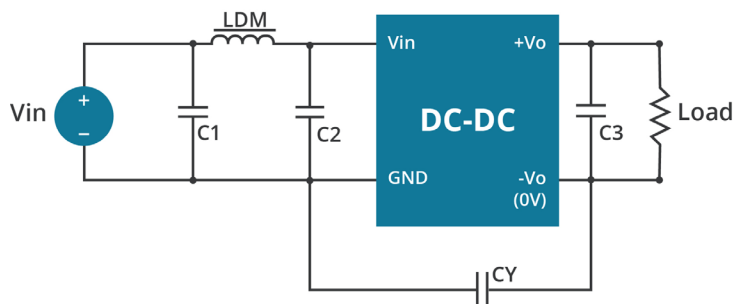
Note: NC pin to be isolated from other circuitry

## RECOMMENDED CIRCUITS



Parameter Description			
Vin (Vdc)	Cin (μF)	Vo (Vdc)	Cout (μF)
5	4.7	3.3/5	10
		9	4.7
		12	2.2
		15	1
		24	0.47

## EMC COMPLIANCE CIRCUITS



Recommended EMC Filter Values			
Output Voltage (Vdc)		3.3/5/9	12/15/24
EMI	C1/C2	47μF / 25V	47μF / 25V
	CY	- -	1nF/4KVDC VISHAY HGZ102MBP TDK CD45-E2GA102M-GKA
	C3	refer to the Cout in table 1	
	LDM	6.8μH	6.8μH

Note: For EMC tests we use Part ① in Fig. 3 for immunity and part ② for emissions test. Selecting based on needs.

## REVISION HISTORY

---

rev.	description	date
1.0	initial release	03/28/2020
1.01	units updated in mechanical drawing section	01/20/2021
1.02	derating curves and circuit figures updated	07/06/2021

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



**Headquarters**  
20050 SW 112th Ave.  
Tualatin, OR 97062  
**800.275.4899**

Fax 503.612.2383  
**cui.com**  
techsupport@cui.com

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

CUI reserves the right to make changes to the product at any time without notice. Information provided by CUI is believed to be accurate and reliable. However, no responsibility is assumed by CUI for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

CUI products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## CUI Inc.:

[PEP1-S5-D12-M](#) [PEP1-S5-D15-M](#) [PEP1-S5-D24-M](#) [PEP1-S5-D3-M](#) [PEP1-S5-D5-M](#) [PEP1-S5-D9-M](#) [PEP1-S5-S12-M](#) [PEP1-S5-S15-M](#) [PEP1-S5-S24-M](#) [PEP1-S5-S3-M](#) [PEP1-S5-S5-M](#) [PEP1-S5-S9-M](#) [PEP1-S5-D12-M-TR](#) [PEP1-S5-D3-M-TR](#) [PEP1-S5-S12-M-TR](#) [PEP1-S5-S15-M-TR](#) [PEP1-S5-D9-M-TR](#) [PEP1-S5-D5-M-TR](#) [PEP1-S5-S5-M-TR](#) [PEP1-S5-S24-M-TR](#) [PEP1-S5-D24-M-TR](#) [PEP1-S5-S3-M-TR](#) [PEP1-S5-D15-M-TR](#) [PEP1-S5-S9-M-TR](#)