

134WE-12

25 Watt, non isolated, single output buck converter

All parameters defined on Ta=25°C, IoNom = 2.0 ADC and UiNom = 110VDC

ABSOLUTE MAXIMUM RATINGS

parameter	unit	typ
Input peak voltage	VDC	170.00
Feedback protection against overvoltage on the output	VDC	16
Worst case output voltage in fault mode	VDC	23
Output overvoltage protection	VDC	16.0

THERMAL CHARACTERISTICS

parameter	min to max	typ
Ambient temperature range	-40°C / +85°C	
Max. case temperature for thermal shut down [°C]		+90°C
Storage temperature [device not in operation]	-10°C / +65°C	
Relative maximum humidity under storage		75% RH
Storage under worst conditions [in days]		25

SPECIALS

parameter	unit	fulfilled	conditions	typ
Switching frequency	kHz			140
Efficiency at medium loads	%		0.5IoNom	93.00
Efficiency at full loads	%		IoNom	92.00
For active loads or parallel connection		✓		
Drives high capacitive loads		✓		
CC/CV battery load characteristic		✓		

COMPLIANCE

parameter	fulfilled	notes
61000-6-2 [EMC-Immunity standard for industrial environment]	✓	
61000-4-2 [immunity against ESD-electrostatic discharge]	✓	
61000-4-3 [immunity High frequency electromagnetic fields]	✓	
61000-4-4 [immunity against burst – electrical fast transients]	✓	
61000-4-5 [immunity against surge - high energy surges]	✓	
61000-4-6 [immunity against induced, conducted disturbances]	✓	
61000-6-4 [EMC – Emission standard for industrial environment]	✓	
55022<A	✓	

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INPUT

parameter	unit	conditions	min	typ	max
Input voltage range	VDC	IoNom	16	110	160
Max. input current	A	UiNom		2	
Input start up voltage	VDC	UiNom		15	
Undervoltage lockout	VDC	UiNom		14	

OUTPUT

parameter	unit	conditions	min	typ	max
Output voltage	VDC	IoNom		12.0	
Minimum required load to obtain the specified output voltage	%	UiNom		0	
Output voltage accuracy	%	IoNom		+/-2.00%	
Output voltage overshoot at initial switch-on	%	IoNom		overdamped	
Rated output power	W			25	

CONTROL

parameter	unit	conditions	min	typ	max
Maximum admissible capacitive load	uF	IoNom		infinite	
Initial switch on time	ms	IoNom		10	
Softstart ramp up time	ms	IoNom		5	
Restart time after undervoltage lockout	ms	IoNom		50	

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MECHANICAL

parameter	unit	
Dimensions	mm	77x52x19
Weight	g	165

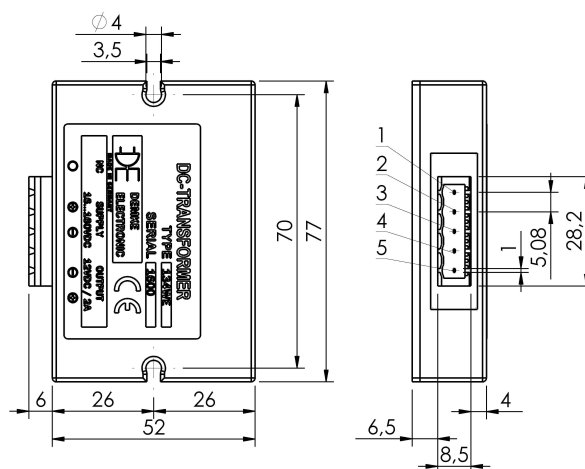
Pin No.	Function	Electrical Determination
1	SD	Shut down
2	Vi+	Input voltage positive
3	Vi-	Input voltage negative
4	Vo-	Output voltage negative
5	Vo+	Output voltage positive

Mechanical dimensions and Pin configuration

All dimensions in mm

Connector type: CCA 2,5/5-G-5,08 P26THR

Case: FMC 77x52x19



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