334W-19-SD

60 Watt, isolated, single output buck-boost converter All parameters defined on Ta=25°C, IoNom = 3.0 ADC and UiNom = 80VDC

ABSOLUTE MAXIMUM RATINGS

parameter	unit	typ
Input peak voltage	VDC	170.00
Feedback protection against overvoltage on the output	VDC	22

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

COMMUNICATION INTERFACE

unit	fulfilled	conditions	min to max
	\checkmark		
VDC		loNom	-0.2 to 2.8
			v

SPECIALS

parameter	unit	fulfilled	conditions	typ
Switching frequency	kHz			125
Efficiency at light loads	%		0.25loNom	91.00
Efficiency at medium loads	%		0.5loNom	90.00
Efficiency at full loads	%		loNom	90.00
MTTF	h		SN29500 @ 70°	1 650 000
For active loads or parallel connection		\checkmark		
Drives high capacitive loads		\checkmark		
CC/CV battery load characteristic		\checkmark		
Coupling capacitance input to output	nF			transformer winding only
Insulation strength primary to secondary	VDC			1500
Insulation strength primary to case	VDC			1500

COMPLIANCE parameter	fulfilled	notes
61000-6-2 (EMC-Immunity standard for industrial environment)	\checkmark	
61000-4-2 (immunity against ESD-electrostatic discharge)	\checkmark	
61000-4-3 (immunity High frequency electromagnetic fields)	\checkmark	
61000-4-4 (immunity against burst – electrical fast transients)	\checkmark	
61000-4-5 (immunity against surge - high energy surges)	\checkmark	
61000-4-6 (immunity against induced, conducted disturbances)	\checkmark	

All technical and general information is provided in all conscience. However, completeness and accuracy cannot be guaranteed. Demke recommends to fully test the product in its determined application. Due to permanent improvements to our products, we reserve the right to change specifications at any time and without prior notification and without obligation to update products already supplied. This is a component for professional equipment manufacturers. Read the safety and installation instruction for proper use. Safety aspect and EMC-aspect must be considered in the end application.



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60 Watt, isolated, single output buck-boost converter

61000-6-4 (EMC – Emission standard for industrial environment)	\checkmark	
55022 <a< th=""><th>\checkmark</th><th></th></a<>	\checkmark	
50155	\checkmark	ready for

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INPUT					
parameter	unit	conditions	min	typ	max
Input voltage range	VDC	loNom	16	80	160
No load input current	mA	UiNom		27	
Max. input current	А	UiNom		4	
Input start up voltage	VDC	UiNom		15.0	
Undervoltage lockout	VDC	UiNom		13.5	
Input quiescent current in shutdown mode	mA	UiNom		1.00	
Input current overshoot during soft start ramp up	%	loNom		50	
Generated AC-ripple on the supply (BW=20MHz)	mVp-p	UiNom/IoNom		300	
Generated HF-noise on the supply (BW=20MHz)	mVp-p	UiNom/IoNom		30	

OUTPUT

unit	conditions	min typ max
VDC	loNom	19.0
%	UiNom	5
%	UiNom	2
mVp-p	UiNom/IoNom	30
mVp-p	UiNom/IoNom	30
%	loNom	+/-2.00%
%	loNom	overdamped
W		60
	VDC % % mVp-p mVp-p % %	VDCIoNom%UiNom%UiNommVp-pUiNom/IoNommVp-pUiNom/IoNom%IoNom

CONTROL

unit	conditions	min typ	max
%	loNom/UiMinUiMax	0.10	
%	loMinloMax/UiNom	1.5	
ms	LoadChange 1090%	0.60	
V	LoadChange 1090%	0.70	
uF	loNom	infinite	
ms	loNom	50	
ms	loNom	15	
	% % ms V uF ms	%IoNom/UiMinUiMax%IoMinIoMax/UiNommsLoadChange 1090%VLoadChange 1090%uFIoNommsIoNom	%IoNom/UiMinUiMax0.10%IoMinIoMax/UiNom1.5msLoadChange 1090%0.60VLoadChange 1090%0.70uFIoNominfinitemsIoNom50

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TECHNICAL DATASHEET

334W-19-SD

60 Watt, isolated, single output buck-boost converter

MECHANICAL

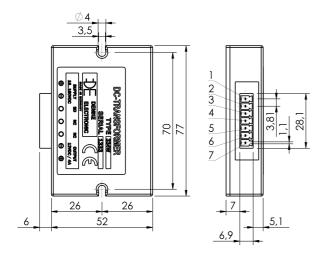
parameter	unit		
Overall dimensions	mm	77x52x19	
Weight	g	170	

Pin No.	Function	Electrical Determination
1	Vi+	Input voltage positive
2	Vi-	Input voltage negative
3	SD	Shut down
4	NC	Not connected
5	NC	Not connected
6	Vo-	Output voltage negative
7	Vo+	Output voltage positive

Mechanical dimensions and Pin configuration

All dimensions in mm

Connector type: MC 1,5/7-G-3,81 P26THR Case: FMC 77x52x19



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