2EE Series 15W DC-DC Converters

Features

- 15W Isolation output
- 2:1 Input Range
- Six-sided Shield
- Remote On/Off Control
- Efficiency To 84%
- 200KHz switching frequency

Model Number	Input Voltage	Output Voltage	Output Current	Input Current No Load	Input Current Full Load	% Efficiency	Case
2EE-01		5 VDC	3000 mA	20 mA	1700 mA	77	
2EE-02		12 VDC	1250 mA	20 mA	1600 mA	78	
2EE-03		15 VDC	1000 mA	20 mA	1600 mA	78	
2EE-04	9-18 VDC	±12 VDC	±625mA	35 mA	1520 mA	82	E
2EE-05		±15 VDC	±500mA	35 mA	1520 mA	82	
2EE-06		5/±12 VDC	1500/±310 mA	30 mA	1600 mA	78	
2EE-07		5/±15 VDC	1500/±250 mA	30 mA	1600 mA	78	
2EE-08		+5/+12/-5 VDC	1500/310/500 mA	30 mA	1470 mA	78	
2EE-11		5 VDC	3000 mA	25 mA	810 mA	77	
2EE-12		12 VDC	1250 mA	25 mA	780 mA	80	
2EE-13		15 VDC	1000 mA	25 mA	780 mA	80	
2EE-14	18-36 VDC	±12 VDC	±625mA	25 mA	750 mA	84	E
2EE-15		±15 VDC	±500mA	25 mA	750 mA	84	
2EE-16		5/±12 VDC	1500/±310 mA	25 mA	780 mA	80	
2EE-17		5/±15 VDC	1500/±250 mA	25 mA	780 mA	80	
2EE-18		+5/+12/-5 VDC	1500/310/500 mA	25 mA	715 mA	80	
2EE-21		5 VDC	3000 mA	10 mA	410 mA	77	
2EE-22		12 VDC	1250 mA	10 mA	390 mA	80	
2EE-23		15 VDC	1000 mA	10 mA	390 mA	80	
2EE-24	36-72 VDC	±12 VDC	±625mA	15 mA	380 mA	82	E
2EE-25		±15 VDC	±500mA	15 mA	380 mA	82	
2EE-26		5/±12 VDC	1500/±310 mA	15 mA	380 mA	82	
2EE-27		5/±15 VDC	1500/±250 mA	15 mA	380 mA	82	
2EE-28		+5/+12/-5 VDC	1500/310/500 mA	15 mA	350 mA	82	

Note: Nominal Input Voltage 12, 24, 28 or 48VDC

Specifications

Input Specifications:

Input Voltage Range……12V……..……..9-18V
24V……..18-36V
48V……..36-72V
Input Filter……..Pi Type

Output Specifications:

Voltage Accuracy
Single output……..……+/- 1.0 % max.
Daul output……..+/- 3.0 % max.
Triple, 5V……+/- 2.0 % max.
12V/15V……..……+/- 3.0 % max.
Voltage Balance (Dual)……..+/- 1.0 % max.
External trim Adj. Range……..……+/- 10%
Ripple & Noise, 20 MHz BW…….. 75 mV p-p max.
Temperature Coeffcient…… +/- 0.02 % /° C max.
Short Circuit Protection……..……Continuous
Line Regulation [1] Single / Dual Output……..+/- 0.2 % max.
Triple……..+/- 1.0% max.
Load Regulation [2] Single / Dual Output……+/- 1.0 % max.
Triple……..……+/- 5.0 % max.

General Specifications:

Efficiency……..……..see table
Isolation Resistance……..100Mohm
Switching Frequency……..200 KHz, min.
Operating Temperature Range……-25° C ~ +71° C
Case Temperature……100 ° C max.
Cooling……Free air convection
Storage Temperature Range……..…-55 ° C ~ +105° C
Isolation Voltage……..……..500VDC min.
EMI/RFI……....Six-sided continus shield
Dimensions……2.65" x3" x 0.83 "(65 x 76.2 x 21.1 mm)
Case Material……..Black Coated Copper with Non-conducted base

Triple output loading table			
Ouput (pin no.)	Voltage (V)	Amperes	
		Min. (2)	Nom.
6	+5	0.25	1.5
3 & 5	+12 or -12	0.1	0.31
3 & 5	+15 or -15	0.1	0.25
3 & 5	+12 or -5	0.1/0.1	0.31/0.5

Note: 1. measured from high lin to low line
2. measured from full load to ¼load
3. maximum total power from all outputs is limited to 15W but no output should be allowed to exceed its maximum current
4. minmum current on each output is required to maintain specified regulation

Outline Information and Pin-out

Pin Connection			
Pin	Single	Dual	Triple
1	+Input	+Input	+Input
2	-Input	-Input	-Input
3	No pin	+Output	+Output
4	Trim	Common	Common
5	No pin	-Output	-Output
6	+Output	No pin	+5V output
7	-Output	No pin	No pin
8	Remote On/Off Control		

Remote On/Off Control	
Logic compatibility	CMOS or Open collector TTL
Ec-0n	>5.5 Vdc or open circuit
Ec-Off	<1.8 Vdc
Shutdown Idle current	10mA
Input resistance	100K ohms (Ein 0Vdc to 9Vdc)
Control common	referenced to Input minus

External Output Trimming

Output may optionally be externally trimmed (+/-10%) with a fixed resistor or an external trimpot as shown.