

ER25/ER30

S E R I E S



25 ~ 30 Watts DIP Type Wide Input DC - DC Converters

FEATURES

- 30W Isolated Output
- Remote On/Off Control
- 2:1/4:1 Input Range
- Efficiency to 84%
- Six-Sided Shield
- 200KHz Switching Frequency

SPECIFICATIONS

Input Voltage Range..... 2:1/4:1 See Note
 Input Filter..... Pi Type
 Voltage Balance(Dual)..... ± 1.0% max.
 Transient Response
 Single, 25% Step Load Change..... <500u Sec.
 Dual, FL-1/2L 1% Error Band..... <500u Sec.
 External Trim Adj.Range..... ± 10%
 Ripple & Noise 20Mhz Bw..... 75mV p-p Max.
 Temperature Coefficient..... ± 0.02%/°C
 Short Circuit Protection..... Continuous
 Line Regulation¹ single/Dual..... ± 0.2% max.
 Triple..... ± 1.0% max.
 Load Regulation²..... Single/Dual..... ± 1.0% max.
 Triple..... ± 5.0% max.
 Efficiency..... See Model List
 Isolation Voltage..... 500VDC min.
 Isolation Resistance..... 10⁹ohms
 Switching Frequency..... 200KHz, typical
 Operating Temperature Range..... -25°C ~ +71°C
 Case Temperature..... 100°C max.
 Cooling..... Free-Air Convection
 Storage Temperature Range..... -55°C to +105°C
 EMI/RFI..... Six-Sided Continuous Shield
 Dimensions..... 2.56x3.0x0.83 Inches(65x76.2x21.1 mm)
 Case Material..... Black coated copper with non-conductive base

All Specifications are Typical at Nominal Line, full Load and 25°C. Unless Otherwise Noted.

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Input Current (mA)		EFF. %
				NoLoad	FullLoad	
ER25-X1	SeeNote	5	5000	20	1350	77
ER30-X2	SeeNote	12	2500	20	1560	80
ER30-X3	SeeNote	15	2000	20	1560	80
ER30-X5	SeeNote	±12	±1250	25	1560	80
ER30-X6	SeeNote	±15	±1000	25	1560	80
ER30-X7	SeeNote	5/±12	3000/±625	25	1650	76
ER30-X8	SeeNote	5/±15	3000/±500	25	1650	76
ER30-X7A	SeeNote	+5/+12/-5	3000/600/1000	25	1450	78

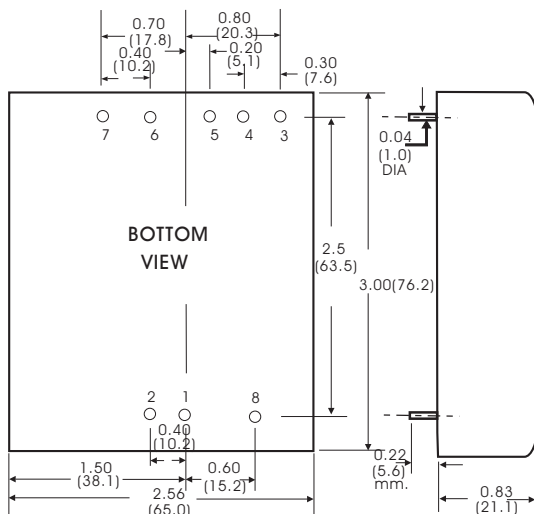
Note:

- X=1, Input Voltage= 9~18VDC, Nominal=12VDC
- X=2, Input Voltage= 18~36VDC, Nominal=24VDC
- X=3, Input Voltage= 36~72VDC, Nominal=48VDC
- X=4, Input Voltage= 9~36VDC, Nominal=24VDC
- X=5, Input Voltage= 18~72VDC, Nominal=48VDC

TRIPLE OUTPUT LOADING TABLE(1)			
Output (Pin No.)	Voltage (VDC)	Amperes	
		Min.(2)	Nom.
6	+5	0.50	3.00
3 & 5	+12 or -12	0.10	0.625
3 & 5	+15 or -15	0.10	0.500
3 & 5	+12 & -5	0.10/0.10	0.60/1.0

1. Maximum total power from all outputs is limited to 30Watts but no output should be allowed to exceed its maximum current.
2. Minimum current on each Output is required to maintain specified regulation.

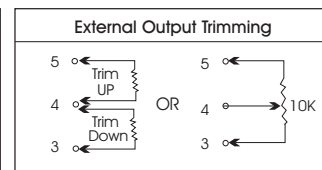
MECHANICAL DRAWING (Unit:inch(mm))



Note:

1. Measured From High Line to Low Line
2. Measured From Full Load to 1/4 Load

Pin	PIN CONNECTION		
	Single Output	Dual Output	Triple Output
1	+VI	+VI	+VI
2	-VI	-VI	-VI
3	+Sense	+Vo	+Vo
4	+Vo Trim	Com.	Com.
5	-Sense	-Vo	-Vo
6	+Vo	NP	+5V Output
7	-Vo	NP	NP
8	Remote On/Off Control		



Remote On/Off Control

Logic Compatibility..... CMOS or Open Collector TTL
 EC-On..... > +5.5VDC or Open Circuit
 EC-Off..... < 1.8VDC
 Shutdown Idle Current..... 10mA
 Input Resistance..... 100K ohms(Ein 0VDC to 9VDC)
 Control Common..... Referenced to Input Minus