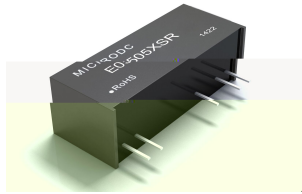


FIXED INPUT, ISOLATED & REGULATED Dual Output DC/DC Converter



- ◆ RoHS compliant
- ◆ Efficiency up to 86%
- ◆ SIP10 Package
- ◆ Wide temperature performance at full 1 Watt load, -40°C to 85°C
- ◆ UL 94V-0 package material
- ◆ No heat sink required
- ◆ Low ripple and good EMC Features
- ◆ Industry standard pin out
- ◆ Power sharing on output
- ◆ 3KVDC isolation
- ◆ Continuous Short Circuit Protection
- ◆ Internal SMD construction
- ◆ No external components required
- ◆ Good dynamic feature

① ② ③ ④ ⑤ ⑥

- ① Product Series
- ② Input Voltage
- ③ Output Voltage
- ④ Fixed Input
- ⑤ SIP Package
- ⑥ Regulated output

The E-XSR series are specially designed for applications where a group of polar power supplies are isolated from the input power supply in a distributed power supply system on a circuit board.

These products apply to:

- 1) where the voltage of the input power supply is fixed (voltage variation $\pm 5\%$);
- 2) where isolation is necessary between input and output (isolation voltage 3000VDC);
- 3) where the regulation of the output voltage and the output ripple noise are demanded.



SELECTION GUIDE

Order code	Input		Output			Efficiency (% Typ)	Switching Frequency (KHz Typ)
	Voltage (VDC)		Voltage (VDC)	Current (mA)			
	Nominal	Range		Max	Min		
E0505XSR	5	4.75-5.25	± 5	± 100	± 10	69	83
E0509XSR	5	4.75-5.25	± 9	± 56	± 6	61	83
E0512XSR	5	4.75-5.25	± 12	± 42	± 5	62	83
E0515XSR	5	4.75-5.25	± 15	± 33	± 4	64	250
E1205XSR	12	11.4-12.6	± 5	± 100	± 10	72	100
E1209XSR	12	11.4-12.6	± 9	± 56	± 6	61	83
E1212XSR	12	11.4-12.6	± 12	± 42	± 5	63	83
E1215XSR	12	11.4-12.6	± 15	± 33	± 4	64	83
E2405XSR	24	22.8-25.2	± 5	± 100	± 10	72	83
E2409XSR	24	22.8-25.2	± 9	± 56	± 6	60	83
E2412XSR	24	22.8-25.2	± 12	± 42	± 5	63	83
E2415XSR	24	22.8-25.2	± 15	± 33	± 4	64	300

ISOLATION SPECIFICATIONS

Parameter	Test conditions	Min.	Typ.	Max.	Units
Isolation test voltage	Flash tested for 1 minute and 1mA max	3000			VDC
Isolation resistance	Test at $V_{iso}=500VDC$	1000			M

OUTPUT SPECIFICATIONS

Parameter	Test conditions	Min	Typ.	Max.	Units
Output power		0.1		1	W
Line regulation	For V_{in} change of $\pm 5\%$			± 0.25	%
Load regulation	10% to 100% full load			± 1	%
Output voltage accuracy	100% full load			± 3	%
Temperature drift	100% full load			0.03	%/°C
Output Ripple*	20MHz Bandwidth		10	20	MV p-p
Output Noise*	20MHz Bandwidth		50	100	MV p-p
Switching frequency	Full load, nominal input		100		Khz

* Test ripple and noise by "parallel cable" method. See detailed operation instructions at Testing of Power Converter section, application notes.

