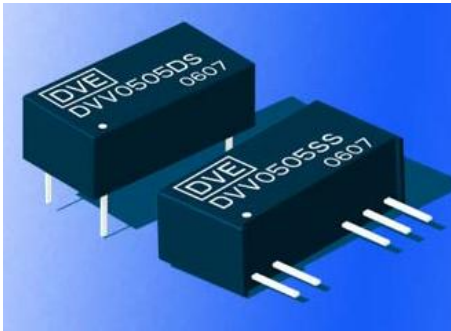




DVVSeries
3kVDC Isolated 1W Single Output DC-DC Converters



FEATURES

- Efficiency up to 82%
- Small Footprint
- SIP/DIP Package
- Single Output Voltage
- 3kVDC Isolation
- Fixed Input Voltage
- Power Density 0.85W/cm³
- Unregulated Output Voltage
- Temperature Range: -40°C~+85°C
- Industry Standard Pinout
- UL94-V0 Package
- No Heat sink Required
- No External Component Required
- MTTF>3,500,000 hours

APPLICATIONS

The DVV Series are specially designed for applications where a single power supply is highly 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 $\leq \pm 10\%$);
- 2) Where isolation is necessary between input and output (isolation voltage =3000VDC);
- 3) Where the regulation of the output voltage and the output ripple and noise are not demanding.

Such as: purely digital circuits, ordinary low frequency analog circuits and IGBT power device driven circuits, etc.

SELECTION GUIDE						
	Nominal Input Voltage	Rated Output Voltage	Output Current		Efficiency	Package Style
			Min	Max		
Order Code	(V)	(V)	(mA)	(mA)	(%,Typ)	
DVV0505DS/SS	5	5	20	200	70	DIP/SIP
DVV0509DS/SS	5	9	12	111	75	DIP/SIP
DVV0512DS/SS	5	9	83	78	78	DIP/SIP
DVV0515DS/SS	5	15	7	67	80	DIP/SIP
DVV1205DS/SS	12	5	20	200	72	DIP/SIP
DVV1209DS/SS	12	9	12	111	76	DIP/SIP
DVV1212DS/SS	12	12	83	78	79	DIP/SIP
DVV1215DS/SS	12	15	7	67	81	DIP/SIP
DVV2405DS/SS	24	5	20	200	73	DIP/SIP
DVV2409DS/SS	24	9	12	111	77	DIP/SIP
DVV2412DS/SS	24	12	83	78	80	DIP/SIP
DVV2415DS/SS	24	15	7	67	82	DIP/SIP
DVV4805DS/SS	48	5	20	200	71	DIP/SIP
DVV4809DS/SS	48	9	12	111	75	DIP/SIP
DVV4812DS/SS	48	12	83	78	78	DIP/SIP
DVV4815DS/SS	48	15	7	67	80	DIP/SIP

INPUT CHARACTERISTICS					
Parameter	Conditions	MIN	TYP	MAX	Units
Voltage Range	All DVV05 Types	4.5	5	5.5	VDC
	All DVV12 Types	10.8	12	13.2	
	All DVV24 Types	21.6	24	26.4	
	All DVV48 Types	43.2	48	52.8	

OUTPUT CHARACTERISTICS					
Parameter	Conditions	MIN	TYP	MAX	Units
Output Power		0.1		1	W
Output Voltage Accuracy	See tolerance envelope graph				
Line Regulation	For Vin change of 1%			1.2	%
Load Regulation	10% To 100% full load		10	15	%
Temperature Drift	100% full load			0.03	%/°C
Temperature Rise	full load		15	25	°C
Ripple & Noise	20Hz-300KHz bandwidth		50	75	mV p-p

ABSOLUTE MAXIMUM RATINGS	
Short-circuit protection	1 second
Lead temperature 1.5mm from case for 10 seconds	300°C

1 All specifications measured at TA=25°C, humidity<75%, nominal input voltage and rated output load unless otherwise specified.

2 See below recommended circuits for more details.

