

KOREA KYEONGWI ELECTRONICS

HIGH VOLTAGE DC-DC CONVERTER KW15-1.25kV

Features

- Isolated DC to DC converter
- More than 80% efficiency @+20V_{in}, 3.2Mohm Load
- Input voltage : 5.0 to 24V_{dc}
- Isolation voltage : Output+1.3kV
- Size : L12.7×W13.2×H12.7mm
- Weight : 5.0g max.

1. Absolute Maximum Ratings

Parameter	Symbol	Minimum	Maximum	Unit
Input voltage range	V _{IN}	-0.3	+24	V _{dc}
Output load	R _L	No load	3.2	MΩ
Junction temperature	T _J	-40	+105	°C
Storage temperature	T _{STR}	-55	+105	°C

2. Recommended Operating Conditions

Parameter	Symbol	Minimum	Maximum	Unit
Input voltage range	V _{IN}	+10	+20	V _{dc}
Output load	R _L	30.3	3.2	MΩ
Operating Temperature	T _A	-40	+70	°C

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3. Electrical Specification : $T_A = +25^{\circ}\text{C}$

PWM INPUT		0 to +5V, Duty 50% ,30kHz, Square wave
Input	Voltage	+5VDC to +24Vdc(+15VDC Nominal)
	Current	25mA Max. @30.3Mohm load
		50mA Max. @3.2Mohm load
Output Voltage	+15V Input	1,500VDC \pm 5%@30.3Mohm Load
	+15V Input	1,040VDC \pm 4%@3.2Mohm Load
Output Current	+15V Input	35mA Max.@3.2Mohm Load
Efficiency	+20V Input	80% Min.@3.2Mohm Load

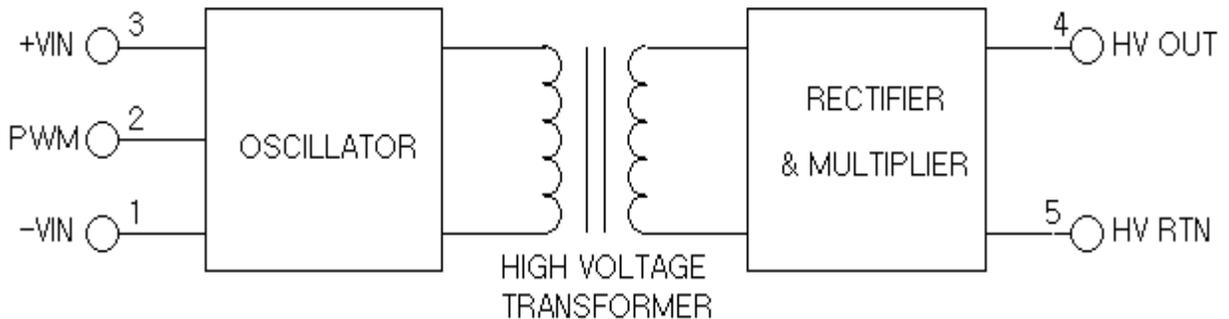
4. Common Specification

Temperature ranges	Operating temperature	-40 °C ~ +70 °C
	Storage temperature	-55 °C ~ +105 °C
Humidity		90%
Temperature Stability		0.05% / °C
I/O-isolation voltage		Output Voltage+1.3kVDC
MAX. OUTPUT CURRENT		0.625mA @24V input
Typical Weight		5.0 gram Max.

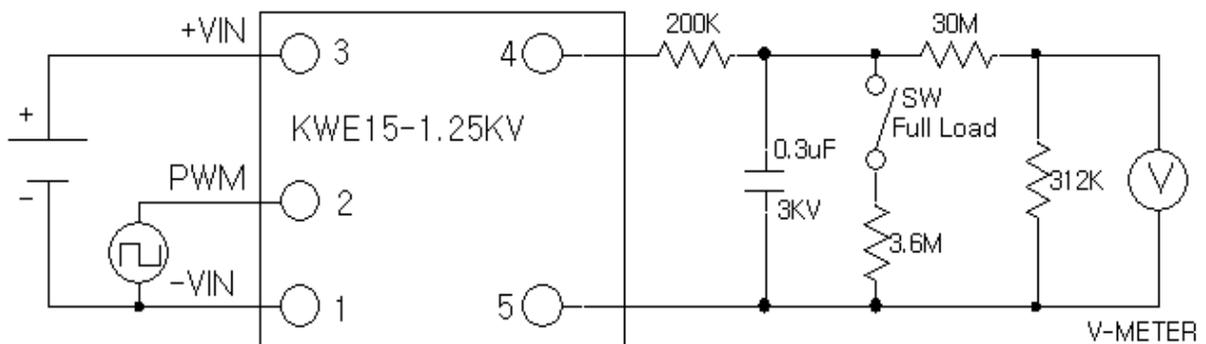
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5. Block diagram



6. Test diagram



7. Dimension

