

VOLTAGE SENSOR



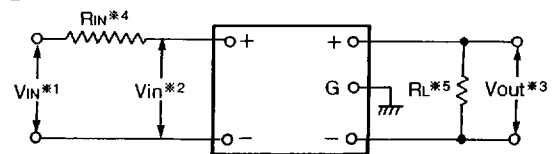
FEATURES:

- Compact & light weight
- Fast response time
- Excellent thermal characteristics
- No external power supply is required
- Complete isolation is provided between the voltage being sensed and the measuring circuit
- Capable of measuring an AC voltage superimposed on a DC voltage
- Capable of measuring high voltage by adding external input resistance

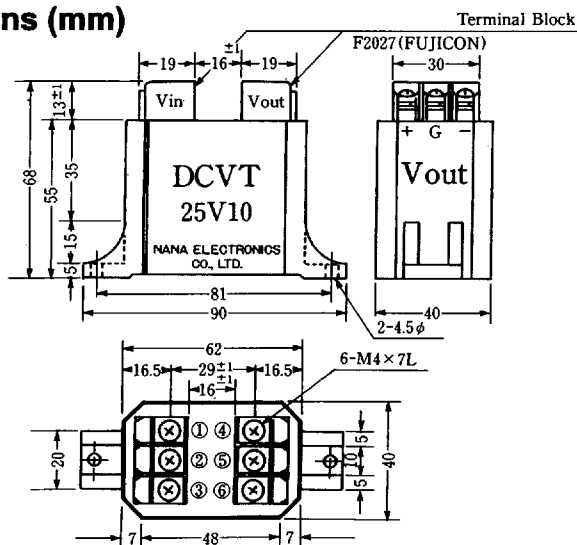
Parameter (Ta = 25°C)	Symbol	DVCT-25V10	NOTE: When sensing voltages which exceed 26.6V, the range of the sensed voltage can be adjusted, e.g.0V~600V, 0V~1,200V, 0V~2,000V, etc by adding an external input resistor R _{IN} on the input side. The formula to find the optimum external input resistor R _{IN} , to obtain an output of 10V for the maximum value of the adjusted range of the sensed voltage is shown below.
Range of Sensed Voltage	V _{IN} *1	0V ~ 2,000V	
Nominal Input Voltage	V _{IN} *2	0V ~ 26.6V	
Output Voltage	V _{OUT} *3	0V ~ 10V V _{OUT} = 0.4V _{IN} - 0.64 (V)	
Load Resistance on Output Side	RL *5	Recommended load resistance: 1KΩ	
Linearity of Output Voltage	ρ	Within ± 1% of output at V _{IN} = 25V	
Response Time	t _{rr}	Rise Time: 20 μsec.; Delay time: 150 μsec	
Thermal Characteristics of Output	-	Within ± 1% between -10°C to +60°C	
		Within ± 2% between -15°C to +80°C	
Dielectric Strength	-	Between the input & output circuits:	5.4KV with 50Hz X 1 minute
		Between the input circuit & the ground:	5.4KV with 50Hz X 1 minute
		Between the output circuit & the ground:	1.5KV with 50Hz X 1 minute
Operating Temperature	Ta	-10 °C to +80°C	
Storage Temperature	Ts	-15°C to +80°C	
Dimensions & Weight	-	90mm X 40mm X 68mm, Approximately 210g	

- V_{IN} *1: Sensed voltage
V_{IN} *2: Nominal input voltage
V_{OUT} *3: Output voltage
R_{IN} *4: External input resistance to be added
R_L *5: Load resistance on output side

Block Diagram



Dimensions (mm)



Terminal Identification

- 1 . . . +V_{IN}
- 2 . . . NC
- 3 . . . -V_{IN}
- 4 . . . +V_{OUT}
- 5 . . . Ground
- 6 . . . -V_{OUT}

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