PRODUCT STANDARD

Doc. No.	DCPT2510A
Title	SPECIFICATIONS OF ISOLATED VOLTAGE SENSOR Model Name: DCPT2510A

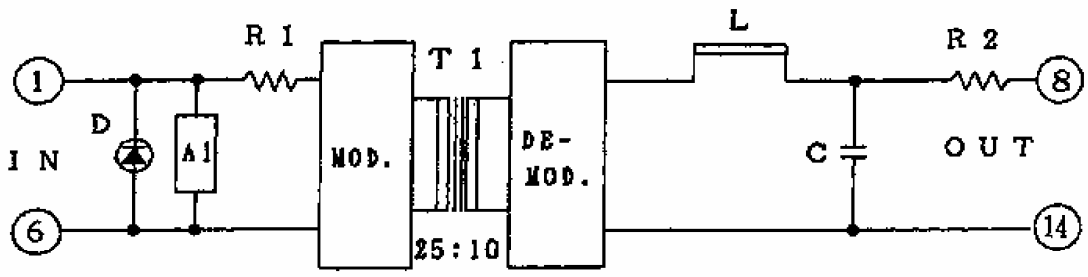
Descriptions

1. DCPT2510A is part of AIKOH ELECTRIC' Isolated Voltage Sensors.

2. Parameters : as per page of 2/4

3. External Dimensions: as per page of 4/4

4. Block Diagrams



5. Operation

The above resistors (R1 & R2) are for circuit protection, for fine adjustment of conversion ratio.
Input signal enters the above MDO and is being amplitude modulation at 60KHz. The modulating wave enters through Transmission Transformer(T1) to Output circuit then demodulated by the above DEMOD.
This output signal is carrier-containing then is reduced under 100mV p-p by LC filter.
The unipolar of Input-Output is ranged DC to 3kHz as passband. And the above A1 is correcting circuit, corrects 3% for transmission signal.

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Model Name: DCPT2510A

Parameter	Conditions	Unit	
Rating			
Primary Absolute Max.			
Peak Forward Voltage	Rin=0Ω	V	30V
Peak Inverse Voltage		V	−0.3V
Peak Inverse Current		A	−0.5A
Withstand Voltage			
1. Primary−Secondary	1 minute (Teminal 5−6)	ACkVrms	5.5
Primary−Shave	1 minute (Teminal 7−8)	ACkVrms	5.5
2. Corona inception voltage	10pC	ACkVrms	2.5
Corona extinction voltage	10pC	ACkVrms	1.8
Withstand Voltage vs.	5.5KV	pC(less or equal)	3000
Corona discharge volume			
Temperature			
Performance Temperature		℃	−10～+70
Operating Temperature		℃	−25～+85
Storage Temparature		℃	−30～+85
Maximum Load current	Load−Resistor 1.2KΩ		
Maximum Output current	at Rin =0Ω Vin=25V	mA	7.5
Short−Circuit Protection	(In case of Load Short, Input Impedance is dropped about 1.4KΩ)		non
Characteristics			
Input Impedance		KΩ	5
Input Voltage		V	25
Input Current	Load−Resistor 2KΩ, Output 10V	mA	120:00:00
Conversion Ratio	Primary, Secondary	:	25:10
Output Voltage Accuracy		%	±1
Offset Voltage	Output(more than 0.6V)	mV(typ.)	±50
Ripple Frequency		kHz	100～130
Output Ripple Voltage		mVp−p	100
Output Voltage Raising Time	0～90%	μs(less or equal)	200
Overshoot(max.)	0～25V (5%−>0.5%)	%/mS	5/1
Internal Power Consumption	Output Voltage 10V	mW	115
Performance			
Linearity of Output Voltage	Output ≧ 1.5V	%(less or equal)	±1
	Output ≦1.5V	%(less or equal)	+1 −2
Temperature Characteristic	at 25℃	%(less or equal)	±1
Frequency Response(−3dB)	DC～	kHz	DC～3
Step Response	10%～90% swing	μs	200
Weight		grum	about 450

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PRODUCT STANDARD

Doc. No.	
Title	SPECIFICATIONS OF VOLTAGE DETECTOR **Model Name: DCPT2510A**

Definition of Step Response

DCPT2581 is provided operational electricity and signal transmission output by limited impedance of signal source which basically depends on circuit voltage. Thus, especially Conditions of Step Response is defined as it follows:

1. Input Conditions

1) Input Wave : Square Wave 1000V 0-P (0～+1000V swing)

2) Input Resistance : 195kΩ

3) Input Wave Rising : Rising Ratio more than 200V/μS

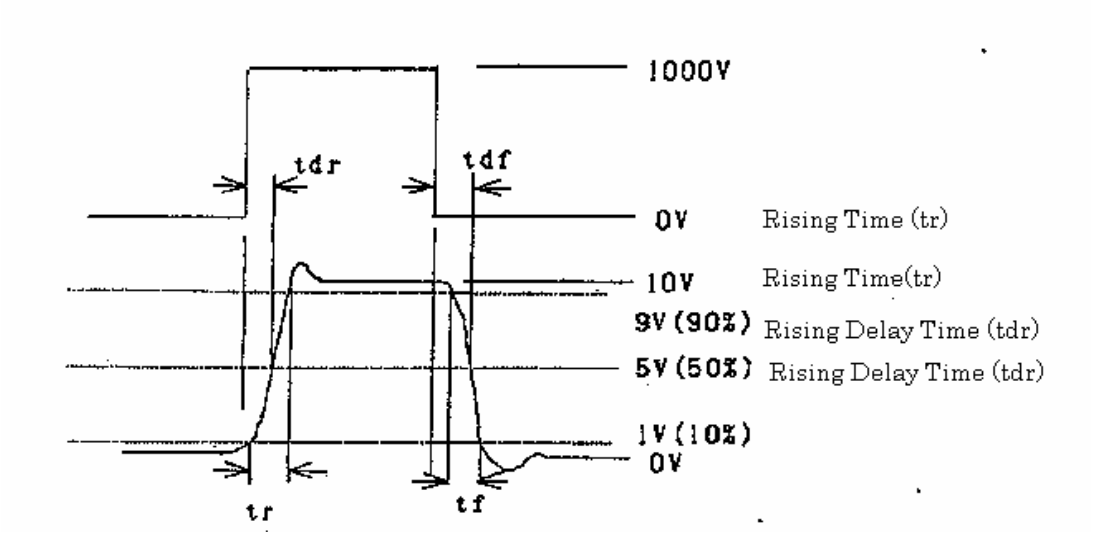
4) Input Recurrence Period : Less or Equal 100Hz (Pulth Width 1～5mS)

2. Output Load Conditions

1) Load Capacitande : Less or Equal 25pF (capacitance of measuring prove)

2) Load Resistance : 10kΩ±1%

3. Measuring Standard



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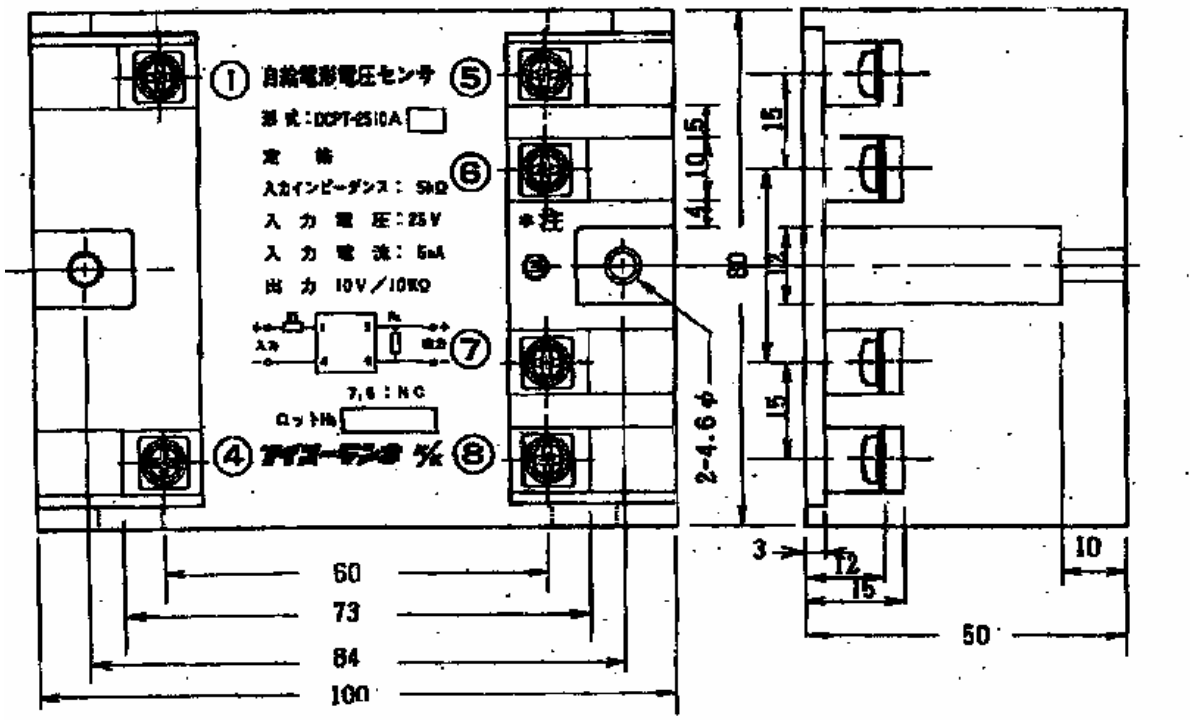
Title	SPECIFICATIONS OF ISOLATED VOLTAGE DETECTOR **Model Name: DCPT2510A**

Dimensions (mm)



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