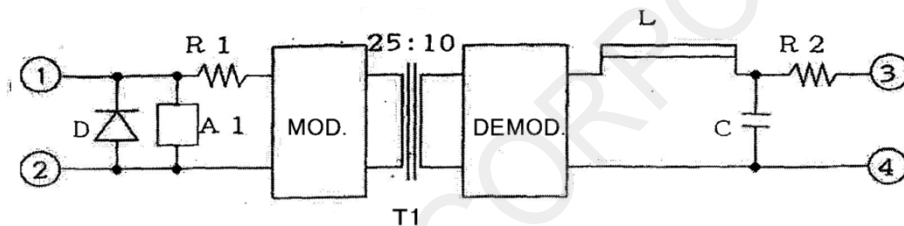


PRODUCT STANDARD

Document Number	ADR 9303-03B
Title	SPECIFICATIONS OF ISOLATED VOLTAGE SENSOR Model Name: DCPT2515

Descriptions

1. DCPT2515 is a part of AIKOH ELECTIRC' 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, and for adjustment of conversion ratio.

Input signal enters the above MOD. and is being amplitude modulation at 150KHz.

The modulating wave enters through transmission transformer (T1) to output circuit then demodulated by the above DEMOD.

This output signal is carrier-containing then reduced under 100mVp-p by LC filter.

The unipolar of Input-Output is ranged DC to 10KHz as passband. And the above A1 is linearity correcting circuit, corrects 3% for transmission signal.

Model Name: DCPT2515

Parameter	Conditions	Unit	Value
Rating			
Primary absolute max. Peak forward voltage		V	30 V
Peak inverse voltage		V	-0.3 V
Peak inverse current		A	-0.5 A
Withstand voltage			
Primary – Secondary	1 minute (Terminal 1, 2) to (Terminal 3, 4)	AckV	10
Primary – Mounting Terminal	1 minute (Terminal 1, 2) to Mounting Terminal	AckV	10
Corona discharge			
Corona inception voltage	(CSV) at <10pC	KV	5.5 (not less)
Corona extinction voltage	(CEV) at <10pC	KV	5.0 (not less)
Withstand voltage vs. Corona discharge volume	10 KV	pC	3000 (less or equal)
Temperature range			
Performance assurance		°C	-10 ~ + 70
Operating ambient temperature		°C	-25 ~ + 85
Storage temperature		°C	-30 ~ + 85
Maximum load current			
Maximum output current	load resistance = 660 Ω at Rin = 0 Ω Vin = 25V (output voltage will be dropped about 5 %)	mA	15
Short-circuit protection	in case of load short, input impedance will be dropped to 400 Ω)		
Characteristics			
Input impedance		KΩ	2.5
Input voltage		V	25
Input current	load resistance = 2KΩ, output 10V	mA	10
Conversion ratio	Primary, Secondary	:	25 : 10
Output voltage accuracy		%	± 1.5
Offset voltage	output voltage (more than 0.6V)	mV	± 50 type
Output ripple frequency		KHz	150 ~ 200
Output ripple voltage		mVp-p	100
Output voltage rising time	0 ~ 90%	μS	40 (less or equal)
Overshoot	0~25V (10% → 2%)	mS	10% 0.3 (less or equal)
Internal power consumption	Output Voltage 10V	mW	200
Performance			
Linearity of output voltage	-10 ~ + 70 °C Output voltage ≥ 1.5V Output voltage ≤ 1.5V	%	± 1 (less or equal) +1, -2 (less or equal)
Temperature characteristics	at 25°C	%	± 1 (less or equal)
Frequency response	-3dB	KHz	DC ~ 10
Step response	10% ~ 90% swing	μS	40 (less or equal)
Weight		gram	about 330

PRODUCT STANDARD

Document Number	ADR 9303-03B
Title	SPECIFICATIONS OF ISOLATED VOLTAGE SENSOR Model Name: DCPT2515

Definition of step response

DCPT2515 is provided operational electricity and signal transmission output by limited impedabce of signal source which basically depebds on circuit volatge. Thus, especially conditions of step response is define as it follows:

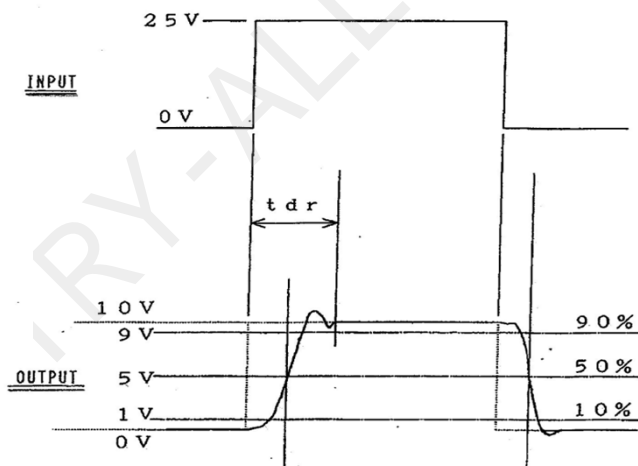
1. Input conditions

- 1) Input wave : Suare Wave 25V 0~P (0~+25V swing)
- 2) Input resistance : 0kΩ
- 3) Input wave rising : more than 200V/μS

2. Output load conditions

- 1) Load capacitance : less or equal 25pF (capacitance of measuring prove)
- 2) Load resistance : 2kΩ ± 1%

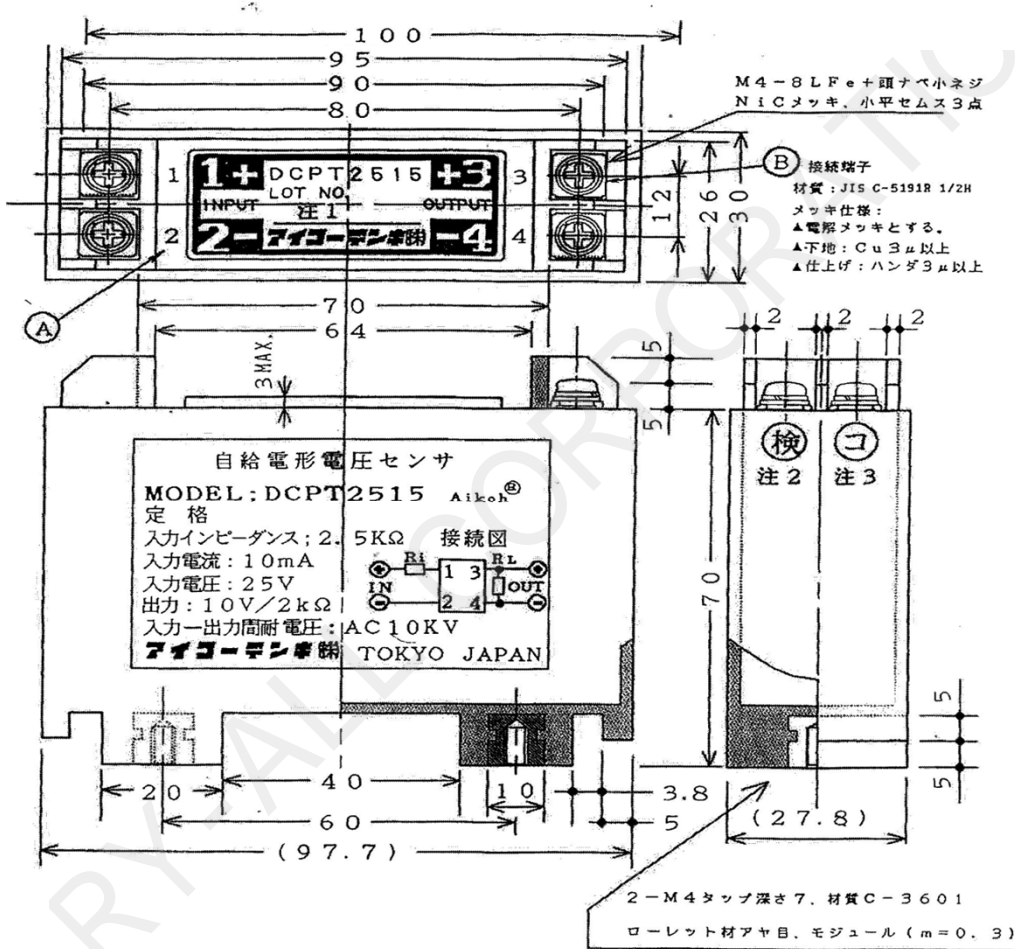
3. Measuring standard



PRODUCT STANDARD

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Dimensions (mm)



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