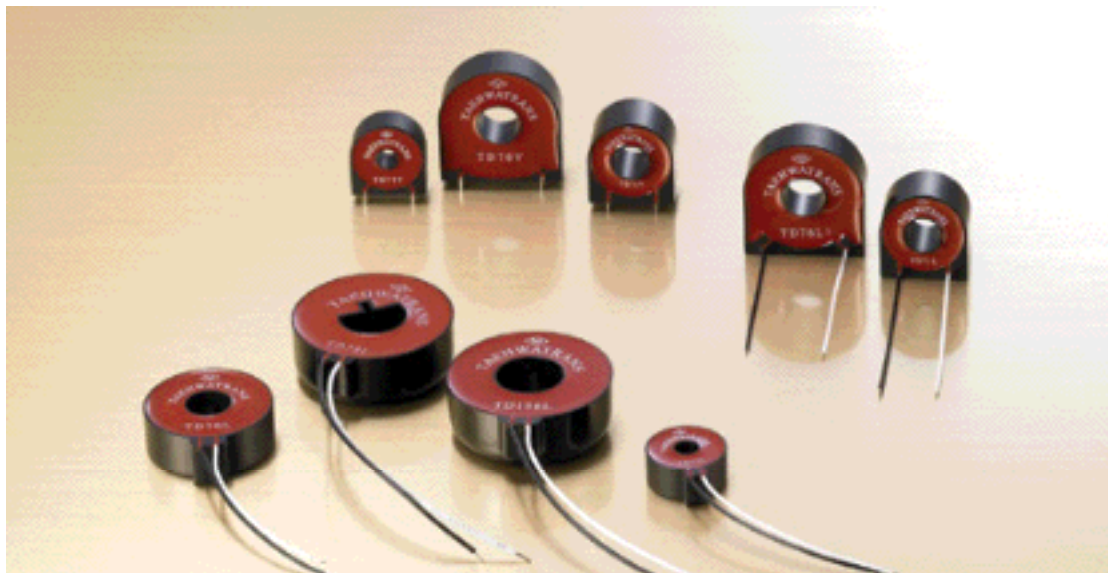


# DC Immune Current Transformer



## Application

- Precision DC immune electronic energy meters conforming to IEC 62053-21 (former IEC 61036)
- Accurate measurement under DC components & anti tampering

## Features

- Excellent linearity & precision
- Steady phase shift & No saturation in DC factor
- Stability from the external magnetic field
- Possible to adopt the permanent magnetic immunity
- High potential voltage of 2.5KV-4.0KV/min
- RoHS compliant

**Standard Accuracy : Class 0.5**

## Model & Specification

(f=50Hz, Rb=1, PF=1.0, unit: percent / minute)

Model No	Current Ratio	Im	Idc	DCR (±0%)	Rn 0.25A	Pn 0.25A	Rn 5A	Pn 5A	Rnv 0.25-5A	Pnv 0.25-5A
TD77V TD77L	2500 : 1	132A	40A	85	±0.4%	215 ′	±0.4%	210 ′	0.1%	8 ′
TD71V TD71L	2500 : 1	216A	60A	81	±0.7%	305 ′	±0.7%	300 ′	0.1%	15 ′
TD76V TD76L	2500 : 1	330A	100A	41	±0.4%	240 ′	±0.5%	235 ′	0.1%	9 ′
TD79L	2500 : 1	486A	160A	27	±0.2%	165 ′	±0.2%	165 ′	0.1%	5 ′
TD106V TD106L	2500 : 1	486A	160A	27	±0.2%	165 ′	±0.2%	165 ′	0.1%	5 ′

(f=50Hz, Rb=1, PF=1.0, unit : percent / minute)

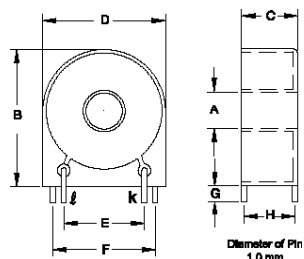
Model No	Current Ratio	Im	Idc	DCR ( $\pm 6\%$ )	Rn 0.25A	Pn 0.25A	Rn 5A	Pn 5A	Rnv 0.25-5A	Pnv 0.25-5A
TD40V TD40L	2500 : 1	145A	40A	100	$\pm 0.4\%$	240'	$\pm 0.5\%$	230'	0.1%	10'
TD60V TD60L	2500 : 1	330A	60A	49	$\pm 0.3\%$	190'	$\pm 0.3\%$	190'	0.1%	2'
TD120V TD120L	2500 : 1	510A	120A	49	$\pm 0.3\%$	200'	$\pm 0.3\%$	200'	0.1%	1'
TD140V TD140L	2500 : 1	540A	140A	56	$\pm 0.3\%$	200'	$\pm 0.3\%$	200'	0.1%	1'

### Definition of Terms

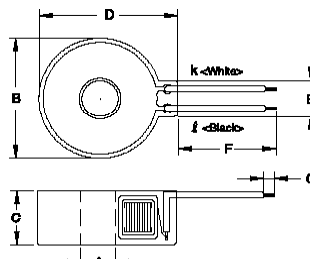
Imax : Max rated current Rn : Nominal ratio error at the mentioned primary current Pn : Nominal phase error at the mentioned primary current  
 Rnv : Nominal variation of ratio error at the mentioned primary current range Pnv : Nominal variation of phase error at the mentioned primary current range  
 Idc : DC immune rated current range Rb : Burden resistance PF : Power factor DCR : DC Resistance of secondary winding

Remark : The data of maximum current, ratio and phase error on 60Hz testing would be around 20% better than that of above 50Hz

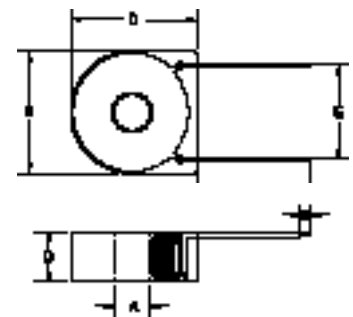
### Drawing



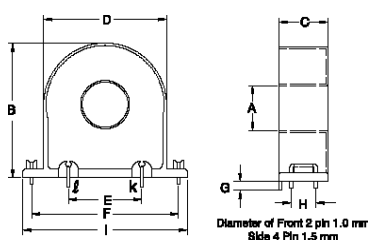
PCB Mountable Type



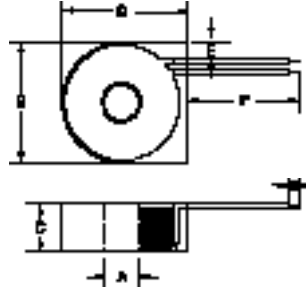
Wire Lead Type



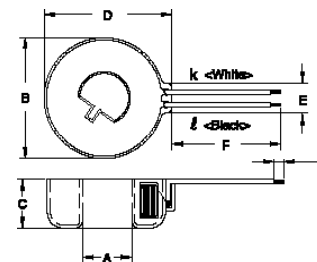
TD71L



TD106V



TD60L



TD79L

# DC Immune Current Transformer

## Dimension

PCB Mountable type

(unit : mm/inch)

Mo de l No	A(min)	B(max)	C(max)	D(max)	E( ±0.3)	F( ±0.3)	G( ±0.5)	H( ±0.3)	I
TD77V	6.8 0.268	25.0 0.984	11.0 0.433	23.5 0.925	15.1 0.594	19.1 0.752	3.0 0.118	9.1 0.358	
TD71V TD40V	11.2 0.441	28.7 1.130	17.0 0.669	26.9 1.059	15.1 0.594	19.1 0.752	3.0 0.118	15.1 0.594	
TD60V	8.0 0.315	31.5 1.240	15.0 0.591	30.5 1.201	18.5 0.728	22.5 0.886	3.0 0.118	13.1 0.516	
TD76V TD120V TD140V	12.9 0.508	39.3 1.547	14.0 0.551	38.0 1.496	25.2 0.992	32.8 1.291	3.0 0.118	12.1 0.476	
TD106V	18.4 0.724	55.5 2.185	20.3 0.799	50.5 1.988	30.3 1.181	60.0 2.362	4.0 0.157	10.0 0.394	67.6 2.661

Wire lead type

(unit : mm/inch)

Mo de l No	A(min)	B(max)	C(max)	D(max)	E(max)	F( ±3.0)	G( ±1.0)
TD77L	6.9 0.272	23.6 0.930	11.0 0.433	26.8 1.055	7.1 0.280	71.0 2.795	3.0 0.118
TD71L TD40L	11.2 0.441	28.7 1.130	17.0 0.669	26.9 1.059	15.1 0.594	71.0 2.795	3.0 0.118
TD60L	8.0 0.315	30.5 1.201	15.0 0.591	31.5 1.240	6.0 0.236	350 13.780	3.0 0.118
TD76L TD120L TD140L	12.9 0.508	37.5 1.476	14.0 0.551	41.3 1.626	10.3 0.406	68.0 2.677	3.0 0.118
TD79L	19.5 0.768	48.2 1.898	19.3 0.760	51.2 2.008	12.2 0.480	270.0 10.630	5.0 0.197
TD106L	19.6 0.772	47.8 1.882	19.2 0.756	52.0 2.047	12.2 0.480	270.0 10.630	5.0 0.197

## Secondary Burden & Output Voltage Graph

