

Subminiature DC Current Hall Amp Sensor  
HPS-25-AP

**SPECIFICATIONS**

**Model** Subminiature DC Current Hall Amp Sensor  
**Model No.** HPS-25-AP

2 Assembly parts / Standards

Case	Material	Hard-beryllium Copper
Case	Resin	PBT resin(20% of gross weight) UL94 V-0
Subcase	Resin	PBT resin(20% of gross weight) UL94 V-0
Core	Particulate	
Winding		200W-61.5
Hall element		GeAs Hall element

3 Pin Configuration

No.1	+15V
No.2	-15V
No.3	Output
No.4	GND
No.5	Input(+)
No.6	Input(-)

1 Specifications

**MANUFACTURER**

**U.R.D.CO.,Ltd.**  
4-169-3 Honcho-Dohri Tsurumi-ku Yokohama  
230-0048 Japan

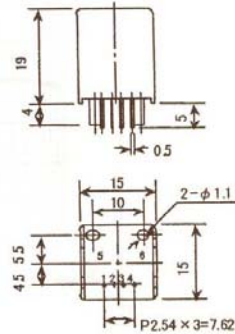
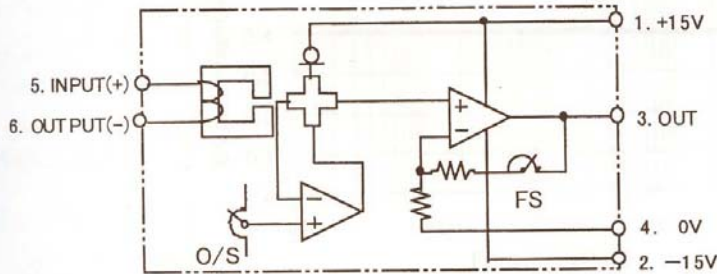
**OVERSEAS DEPT**

**U.R.D.International,Inc.**  
1-23-14-301 Tsurumi-chuo Tsurumi-ku Yokohama  
230-0051 Japan  
**FAX:+81-45-505-9803**  
**TEL:+81-45-505-9802**

<b>DATE</b>	<b>1999.11.15</b>
<b>Approved</b>	<b>G.MURAKAMI</b>

### Subminiature DC Current Hall Amp Sensor HPS-25-AP

**1. Circuit Diagram/Outward Dimensions:**



**2. Assembly parts / Standard:**

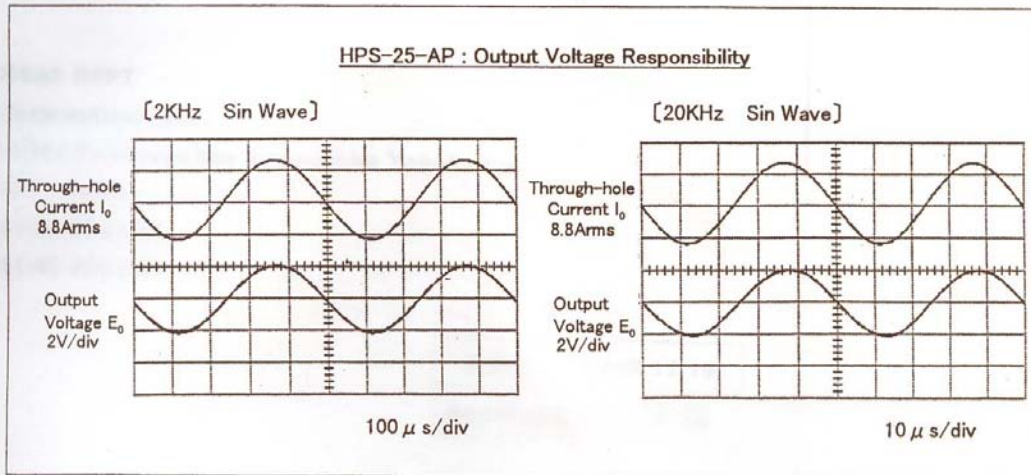
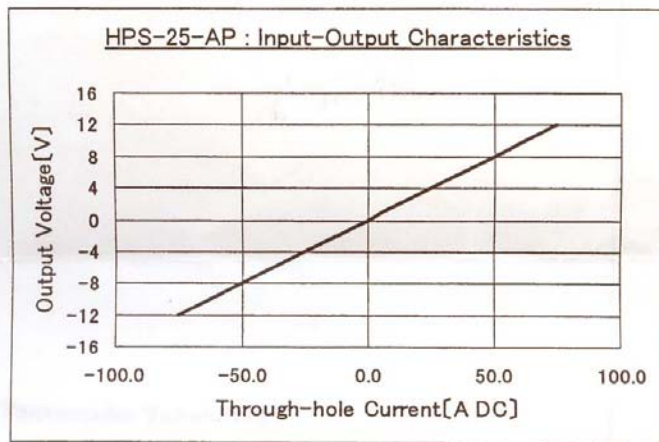
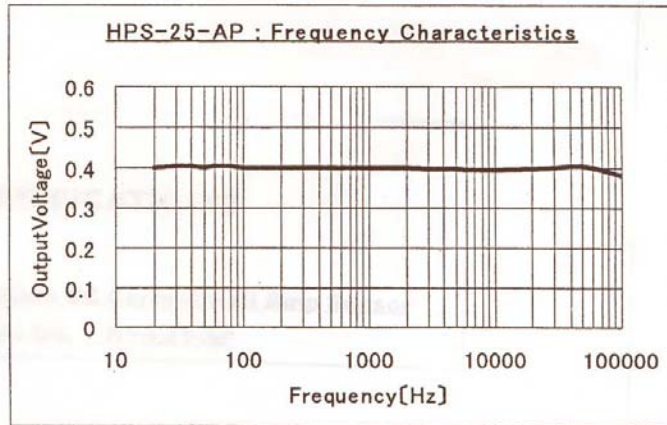
Part	Material	Hard-flammability Standard
Case	PBT resin(20% of glass contained)	UL94 V-0
Bobbin	PBT resin(20% of grass contained)	UL94 V-O
Core	Permalloy	-----
Winding	2UEW- $\phi$ 1.8	-----
Hall element	GaAs Hall element	-----

**3. Pin Configuration**

No.1	+15V
No.2	-15V
No.3	Output
No.4	GND
No.5	Input(+)
No.6	Input(-)

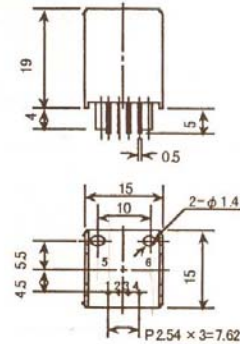
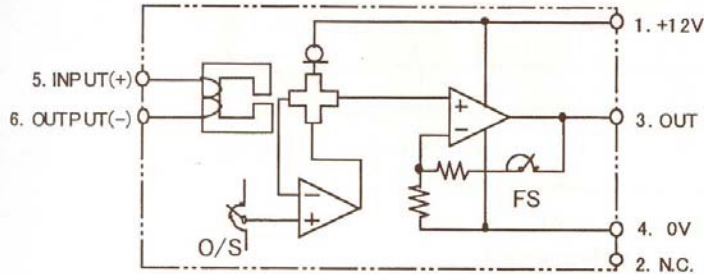
**4. Specifications:**

Continuous Rated Current	$\pm 25A$
Non-saturated Max.Current	$\pm 75A$
Output Voltage	$\pm 4V$ /Rated Current, $\pm 12V$ /Max.Current
Residual Voltage	within $\pm 30mV$ (at no load)
Noise Level	20mVp-p or less (at no load)
Output Accuracy/Linearity	within $\pm 1\%$ Full Scale
Response time	3 $\mu$ sec or less (at di/dt=FS/2 $\mu$ sec)
Output Voltage Temp.Coefficient	$\pm 0.1\%/^{\circ}C$
Control Power Supply	$\pm 15V \pm 5\%$ (25mA Typ.) Split P/S
DC Resistance of Primary Winding	0.4m $\Omega$
Max.Allowable Pulse Current	Rated Current x 10 times for 50msec
Dielectric Strength	AC2000V/1min (Between Primary winding/Control terminals)
Insulation Resistance	$\geq DC500V/500M\Omega$ (Between Primary winding/Control terminals)
Operating Temp.	-20 $^{\circ}C$ ~ +75 $^{\circ}C$ , $\leq 85\%RH$ , No condensation
Storage Temp.	-30 $^{\circ}C$ ~ +90 $^{\circ}C$ , $\leq 85\%$ , No condensation
Weight	7g



**Subminiature DC Current Hall Amp Sensor  
HPS-25-AS**

**1. Circuit Diagram/Outward Dimensions:**



**2. Assembly parts / Standard:**

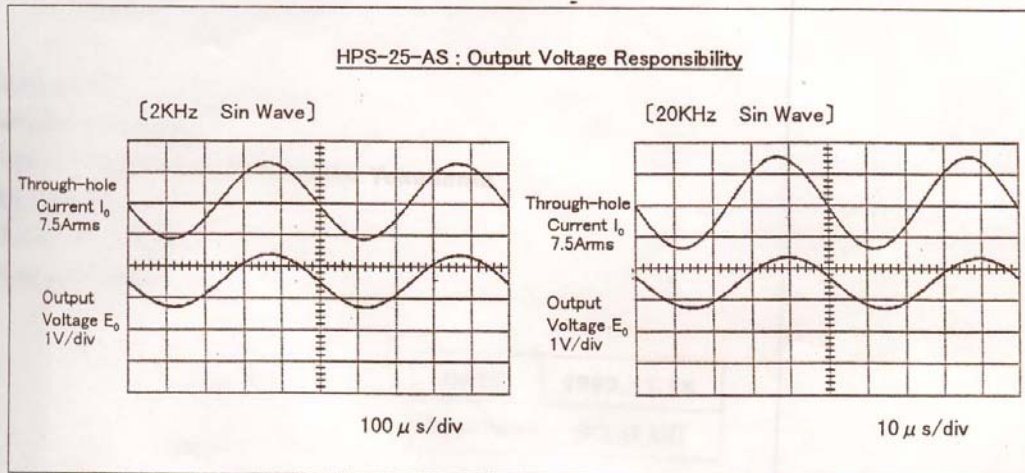
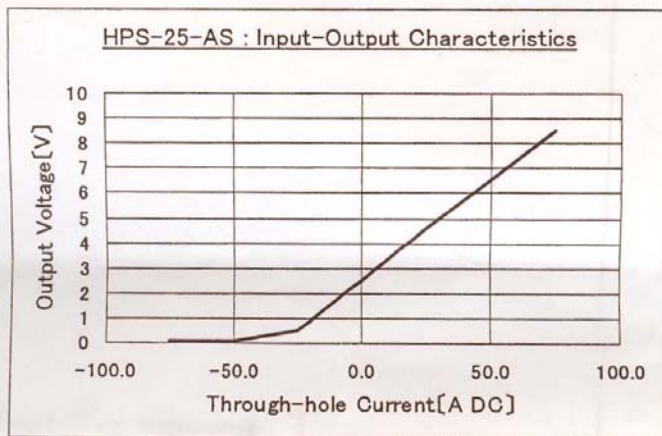
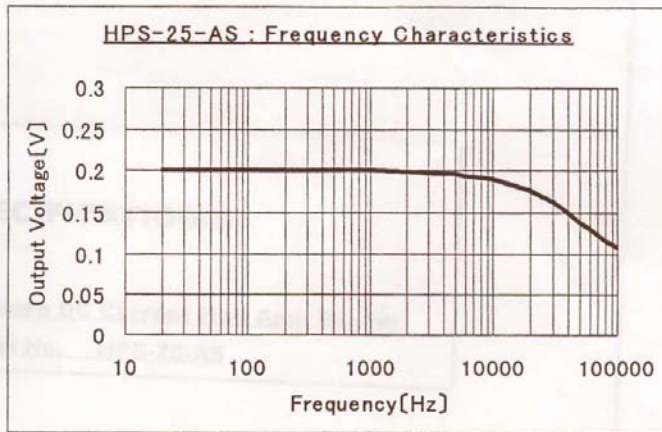
Part	Material	Hard-flammability Standard
Case	PBT resin(20% of glass contained)	UL94 V-0
Bobbin	PBT resin(20% of grass contained)	UL94 V-O
Core	Permalloy	-----
Winding	2UEW- $\phi$ 1.8	-----
Hall element	GaAs Hall element	-----

**3. Pin Configuration**

No.1	+12V
No.2	N.C.
No.3	Output
No.4	GND
No.5	Input(+)
No.6	Input(-)

**4. Specifications:**

Continuous Rated Current	$\pm 25A$
Non-saturated Max. Current	$\pm 25A$
Output Voltage	$2.5V \pm 2V$ /Rated Current
Residual Voltage	within $2.5V \pm 20mV$ (at no load)
Noise Level	$20mVp-p$ or less (at no load)
Output Accuracy/Linearity	within $\pm 1\%$ Full Scale
Response time	$3 \mu sec$ or less (at $di/dt=FS/2 \mu sec$ )
Output Voltage Temp. Coefficient	$\pm 0.1\%/^{\circ}C$
Control Power Supply	$+12V \pm 5\%$ (25mA Typ.) Single P/S
DC Resistance of Primary Winding	$0.4m\Omega$
Max. Allowable Pulse Current	Rated Current x 10 times for 50msec
Dielectric Strength	$\dot{A}C2000V/1min$ (Between Primary winding/Control terminals)
Insulation Resistance	$\geq DC500V/500M\Omega$ (Between Primary winding/Control terminals)
Operating Temp.	$-20^{\circ}C \sim +75^{\circ}C, \leq 85\%RH$ , No condensation
Storage Temp.	$-30^{\circ}C \sim +90^{\circ}C, \leq 85\%$ , No condensation
Weight	7g



**SPECIFICATIONS**

**Model Subminiature DC Current Hall Amp Sensor**  
**Model No. HPS-25-AS**

2. Assembly parts / Standard:

Part	Material	Hard-temperature Standard
Case	PBT resin(20% of glass content) UL94 V-0	
Bobbin	PBT resin(20% of glass content) UL94 V-0	
Cure	Epoxide	
Wiring	250W-21.5	
Hall element	Cr02 Hall element	

3. Pin Configuration

No.1	V <sub>CC</sub>
No.2	V <sub>CC</sub>
No.3	Output
No.4	GND
No.5	Input(+)
No.6	Input(-)

4. Power/Performance

**MANUFACTURER**  
**U.R.D.CO.,Ltd.**  
**4-169-3 Honcho-Dohri Tsurumi-ku Yokohama**  
**230-0048 Japan**

**OVERSEAS DEPT**  
**U.R.D.International,Inc.**  
**1-23-14-301 Tsurumi-chuo Tsurumi-ku Yokohama**  
**230-0051 Japan**  
**FAX:+81-45-505-9803**  
**TEL:+81-45-505-9802**

<b>DATE</b>	<b>1999.11.15</b>
<b>Approved</b>	<b>G.MURAKAMI</b>