Hall Effect Current Sensors S26P200D15Y

Features:

- Closed Loop type
- Current or voltage output
- Conversion ratio K_N = 1:2000
- Printed circuit board mounting
- Aperture
- Insulated plastic case according to UL94V0
- UL Recognition

Advantages:

- Excellent accuracy and linearity
- Low temperature drift
- Wide frequency bandwidth
- No insertion loss
- High Immunity to external interferences
- Optimised response time
- Current overload capability

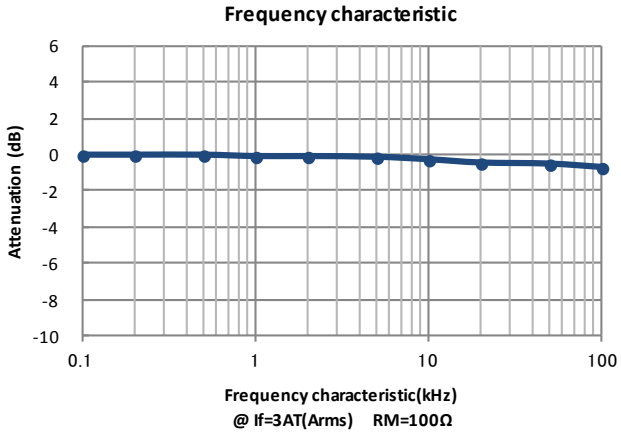
Specifications

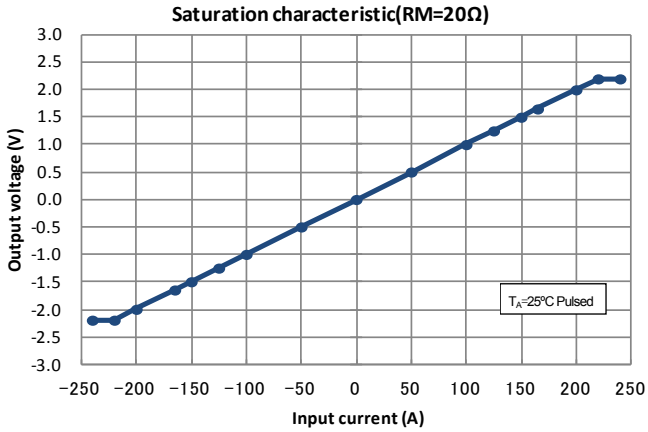
T_A=25ºC, V_{CC}=±15V

Parameters	Symbol	S26P200D15Y	
Primary nominal current	I_f	200A	300A
Maximum current[1] (at 85°C)	I_{fmax}	± 350A (at $R_M \leq 5\Omega$)	
Measuring resistance（at 85°C)	R_M	0Ω ~ 26Ω (at V_{CC} = ±12V) 0Ω ~ 56Ω (at V_{CC} = ±15V)	0Ω ~ 4Ω (at V_{CC} = ±12V)[2] 0Ω ~ 8Ω (at V_{CC} = ±15V)
Conversion Ratio	K_N	1 : 2000	
Rated output current	I_O	100mA	150mA
Output current accuracy[3](at I_f)	X	I_O ± 0.4%	
Offset current[4](at If=0A)	I_{Of}	≤ ± 0.2mA	
Output linearity[3](0A～If)	ε_L	≤ ± 0.15% (at I_f)	
Power supply voltage[1]	V_{CC}	± 12V .. ± 15V ± 5%	
Consumption current	I_{CC}	≤ ± 16mA (Output current is not included)	
Response rime[5]	t_r	≤ 1.0μs (at di/dt = 100A / μs)	
Thermal drift of gain[6]	Tclo	≤ ± 0.01% / ºC	
Thermal drift of offset current	Tclof	≤ ± 0.5mA max (at T_A = – 40ºC ⇔ +85ºC)	
Hysteresis error	I_{OH}	≤ 0.3mA (@ I_f=0A → I_f → I_f=0A)	
Insulation voltage	V_d	AC 3000V, for 1minute (sensing current 0.5mA), inside of through hole ⇔ terminal	
Insulation resistance	R_{IS}	≥ 500MΩ (@ DC 500V) , inside of through hole ⇔ terminal	
Secondary coil resistance	R_S	60Ω (at T_A = 70ºC) , 65Ω (at T_A = 85ºC)	
Ambient operation temperature	T_A	– 40ºC ~ +85ºC	
Ambient storage temperature	T_S	– 40ºC ~ +90ºC	

[1] Maximum current is restricted by V_{CC} — [2] I_f = 250A — [3] Without offset current— [4] After removal of core hysteresis— [5] Time between 90% input current full scale and 90% of sensor output full scale — [6] Without Thermal drift of offset current

Electrical Performances





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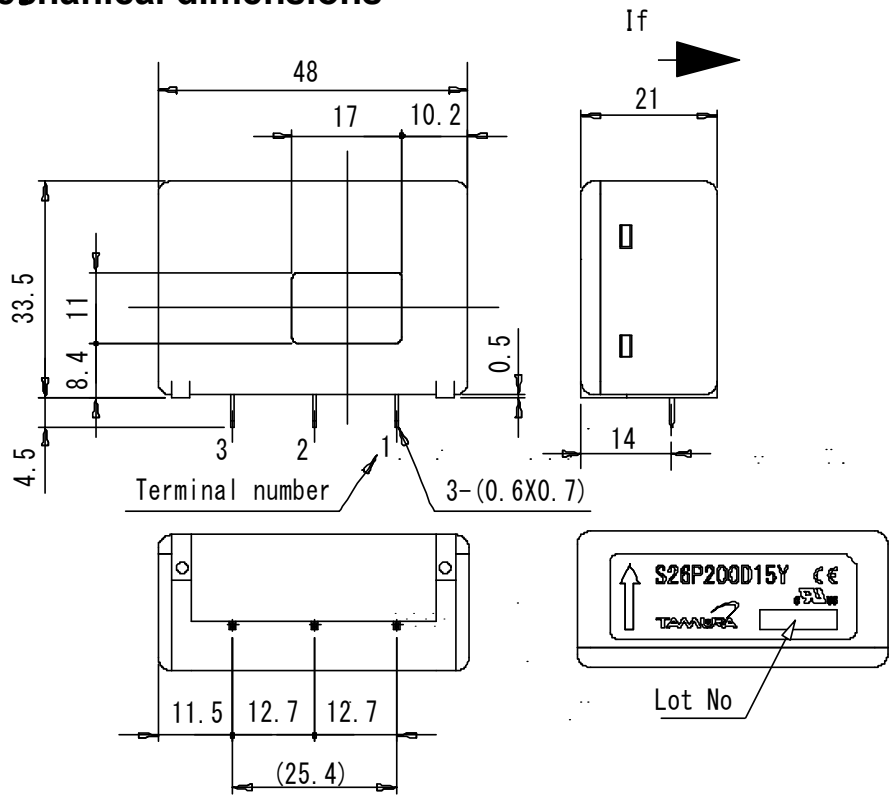
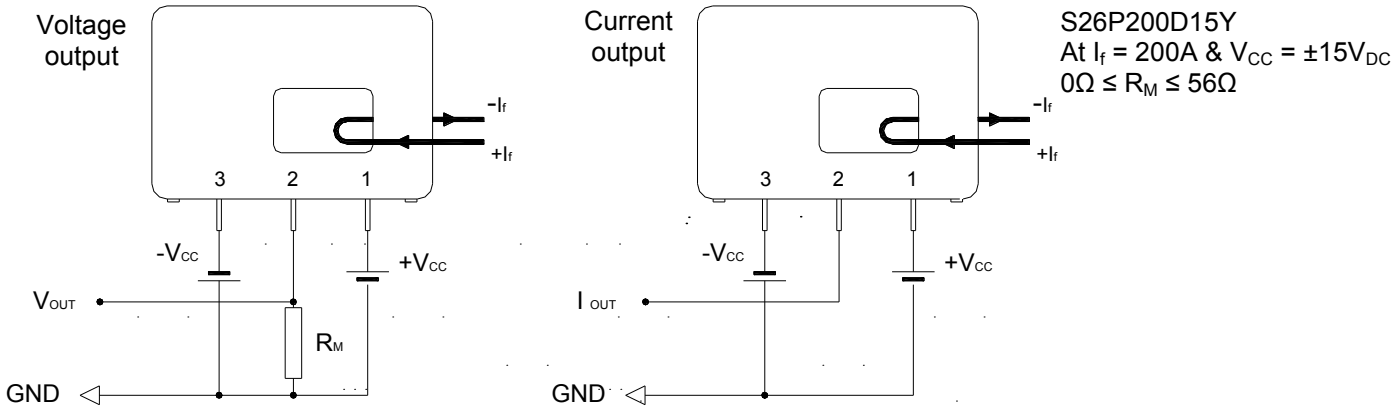
Mechanical dimensions



NOTES
1. Unit is mm
2. Tolerance is 0.5mm

Terminal number:
1. +Vcc(+15V)
2. I_{OUT}
3. –Vcc(-15V)

Electrical connection diagram



S26P200D15Y
At I_f = 200A & V_{CC} = ±15V_{DC}
0Ω ≤ R_M ≤ 56Ω

UL Standard

UL 508 , CSA C22.2 No.14 (UL FILE No.E243511)
- For use in Pollution Degree 2 Environment.
- Maximum Surrounding air temperature rating, 85˚C.

CAUTION

Do not wrap the primary conductor around the core part of the product to increase measured current.

Package & Weight Information

Weight	Pcs/box	Pcs/carton	Pcs/pallet
45g	50	200	5400