Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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Hall Effect Current Sensors S20S200D15M1

Features:

- Closed Loop type
- Voltage or current output
- Panel mounting
- JST connector
- Insulated plastic case according to UL94V0

Advantage:

- Excellent accuracy
- Very good linearity
- Low temperature drift
- Wide frequency bandwidth
- No insertion loss
- High Immunity To External Interference
- Optimised response time
- Current overload capability

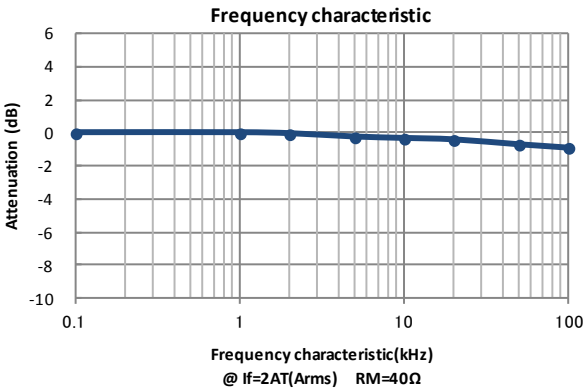
Specifications

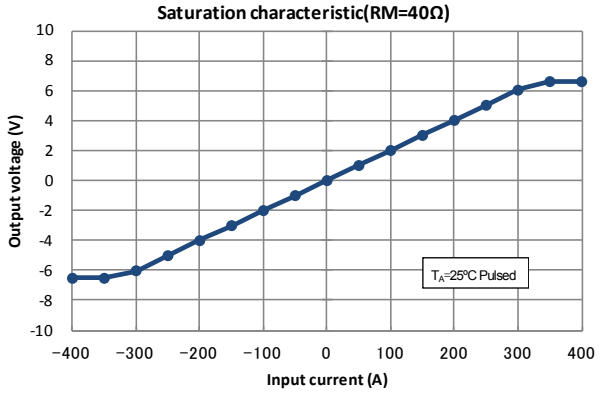
T_A=25ºC, V_{CC}=±15V

Parameter	Symbol	S20S200D15M1	
Primary nominal current	I_f	200A	300A
Maximum current[1] @70ºC V_{CC}=±15V	I_{fmax}	±300A (at R_M=30Ω)	
Measurement resistance @70ºC	R_M	5Ω~35Ω (at V_{CC} = ±12V)	9Ω~13Ω (at V_{CC} = ±12V)
		25Ω~65Ω (at V_{CC} = ±15V)	29Ω~33Ω (at V_{CC} = ±15V)
Conversion ratio	K_N	1 : 2000	
Rated output current	I_O	100mA	150mA
Output current accuracy[2](at I_f)	X	Io±1%	
Offset current[3](at If=0A)	I_{Of}	≤ ±0.5mA	
Output linearity[2](0A∼If)	ε_L	≤ ±0.25% (at I_f)	
Power supply voltage[1]	V_{CC}	± 12V .. ± 15V ± 5%	
Consumption current	I_{CC}	≤ ±16mA (Output current is not included)	
Response rime[4]	t_r	≤ 1μs (at di/dt = 100A / μs)	
Thermal drift of gain[5]	TcIo	≤ ±0.02%/ºC (at T_A= -5ºC~+70ºC)	
Thermal drift of offset current	TcIof	≤ ±0.012mA/ºC (at T_A= -5ºC~+70ºC)	
Hysteresis error	I_{OH}	≤ 0.3mA (at I_f=0A → I_f → 0A)	
Insulation voltage	V_d	AC2500V, for 1minute (sensing current 0.5mA), inside of through hole ⇔ terminal	
Insulation resistance	R_{IS}	≥ 500MΩ (at DC500V), inside of through hole ⇔ terminal	
Secondary coil resistance	R_S	33Ω (at T_A=70ºC)	
Ambient operation temperature	T_A	-20ºC ~ +70ºC	
Ambient storage temperature	T_S	-20ºC ~ +85ºC	

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

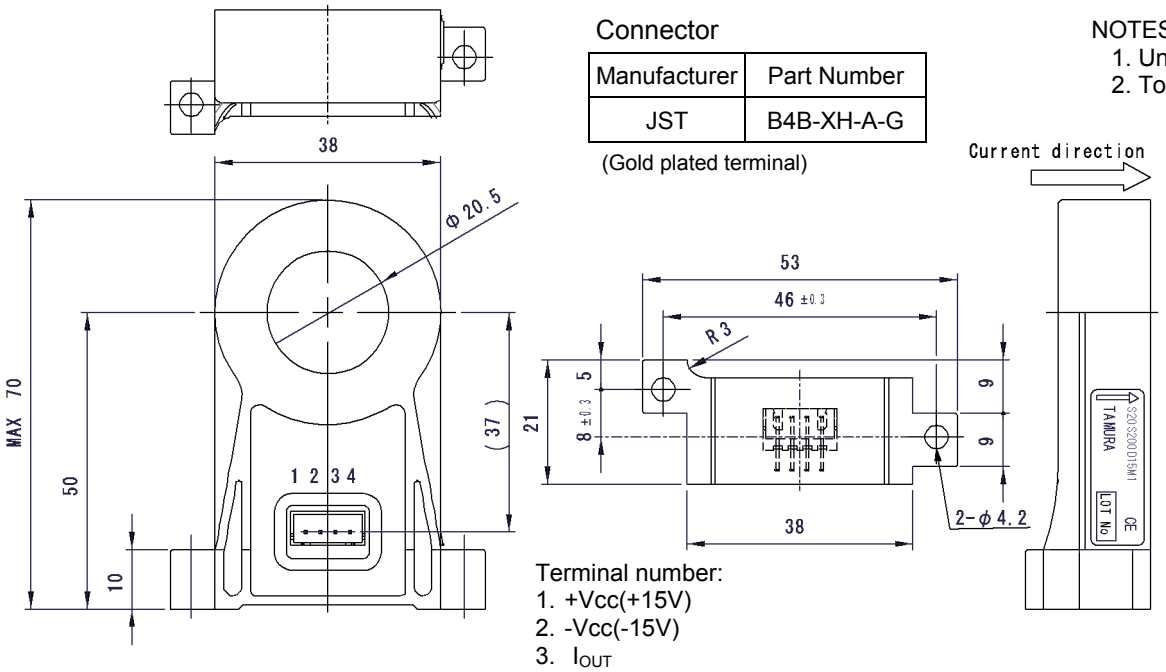
Electrical Performances





Hall Effect Current Sensors S20S200D15M1

Mechanical dimensions



Connector

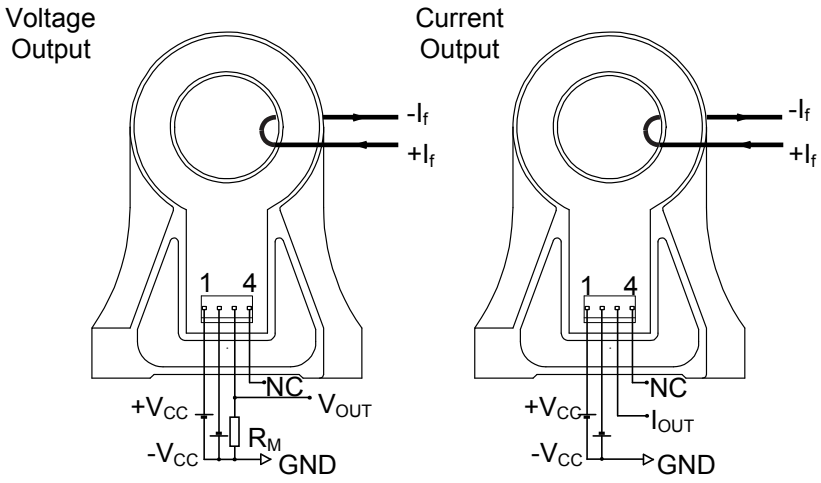
Manufacturer	Part Number
JST	B4B-XH-A-G

(Gold plated terminal)

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

Terminal number:
1. +Vcc(+15V)
2. -Vcc(-15V)
3. I_{OUT}
4. NC(No connection)

Electrical connection diagram



@ I_f=200A & V_{CC}=±15V
25Ω ≤ R_M ≤ 65Ω
@ I_f=300A & V_{CC}=±15V
29Ω ≤ R_M ≤ 33Ω

Package & Weight Information

Weight	Pcs/box	Pcs/carton	Pcs/pallet
46g	50	200	2400