

HM-Z



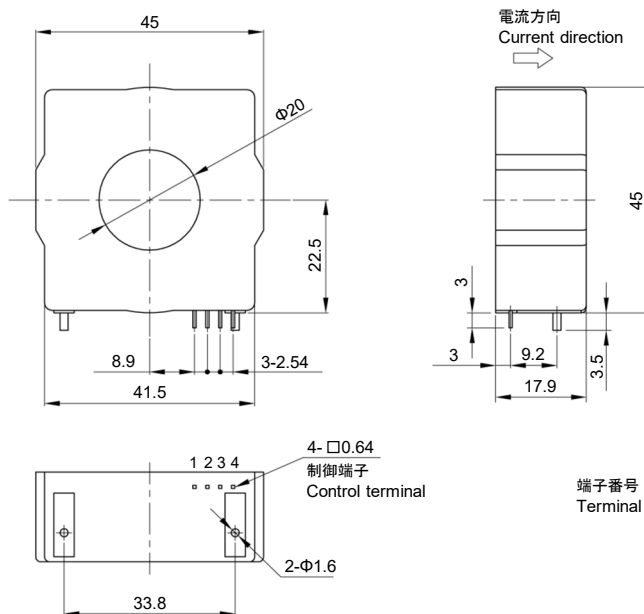
- 定格電流値 ... 300mA、600mA  
Rated current ... 300mA, 600mA
- パワコン等の直流漏電電流検出用途に最適  
Optimum for direct current leakage detection application for power conditioning systems etc.
- 電線貫通で直流微小電流を高精度に検出可能  
Minute direct electric current detectable by electric wire penetration
- オフセットドリフトが小さい  
Small offset drift

用途 Applications

太陽光発電パワコン, インバータ装置, サーボドライバ  
Power conditioning systems, Inverters, Servo drivers

外形寸法図 Dimensions

(mm)



- 端子番号 Terminal No.
- 1 ... 制御電源 (+) (+) terminal
  - 2 ... GND
  - 3 ... 基準出力電圧 Reference output voltage
  - 4 ... 出力 Output

質量 Weight : 28g

一般公差: ±0.5  
General tolerance: ±0.5

電気特性 Specification

Ta=25°C

形名 (Type)	電圧出力タイプ (Voltage output type)	
	HM-Z003V12PP5	HM-Z006V1486PP5
定格電流 [If] (Rated current)	±300mA	±600mA
連続通電DC電流 (Continuously flowing DC current)	±500mA	±850mA
飽和電流 [Is] (Saturation current)	±520mA	±870mA
直線性範囲 (Linearity limits)	0~±500mA	0~±850mA
内部基準電圧 [Vref] (I=0) (Internal reference voltage)	+2.5V±5mV	
外部基準入力電圧 [Vref] (External reference input voltage)	1.5~4V	
定格出力 [Vh] (I=If, output-Vref) (Rated output) RL>500kΩ	V0±1.2V±1.6%	V0±1.4856V±1%
残留出力 [V0] (I=0, output-Vref) (Residual output)	Within ±96mV	Within ±60mV
直線性 (Output linearity)	Within ±1%	
応答速度 (Response time)	Within 50μs (at di/dt=If/μs)	Within 30μs (at di/dt=If/μs)
過渡特性 (Response performance)	Within 10%	
ヒステリシス巾 (Hysteresis voltage range)	Within 10mV	
出力温度特性 (Output Temp. Coef.)	Within ±0.04%/°C	Within ±0.01%/°C
残留出力温度特性 (Residual output Temp. Coef.)	Within ±1.425mV/°C	Within ±1.3mV/°C
内部基準電圧温度特性 (Internal reference voltage Temp. Coef.)	Within ±0.125mV/°C	
制御電源 [Vcc] (Control power supply)	+5V±5%	
消費電流 (Consumption current)	25mA+(Input current/1000)	
自己消磁機能 (Degauss mode)	制御電源投入時、または外部Vref入力0.8V以下から復帰時に動作 Operates when control power is turned on or at the time of recovery from external Vref input 0.8V or less.	
使用温度範囲 (Operating Temp.)	-40°C~+105°C	
保存温度範囲 (Storage Temp.)	-40°C~+105°C	
耐電圧 (Dielectric withstand voltage)	3500V AC 50/60Hz 1minute	
絶縁抵抗 (Insulation resistance)	Not less than 500MΩ 500V DC	

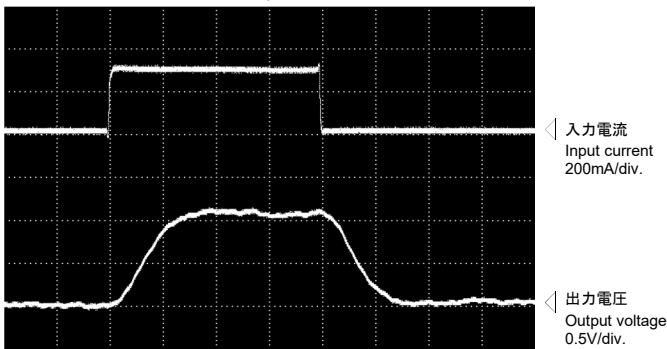
- Note1) 残留出力値はコアヒステリシス除去後の値です。 The indicated residual output is the one after the core hysteresis is removed.
- Note2) 連続通電DC電流×150%の通電時間は1分以内のこと。 Energization time of continuous live DC current x150% shall be within 1 minute.
- Note3) 本仕様は基準電圧 (Vref) を基準として精度を求めた場合です。  
In this specification, accuracy was determined with reference to the reference voltage (Vref).
- Note4) 基準電圧は内部リファレンス出力と外部リファレンス入力の2種類モードがあります。  
For the reference voltage, there are 2 types of modes of internal reference output and external reference input.

特性図 Characteristics chart

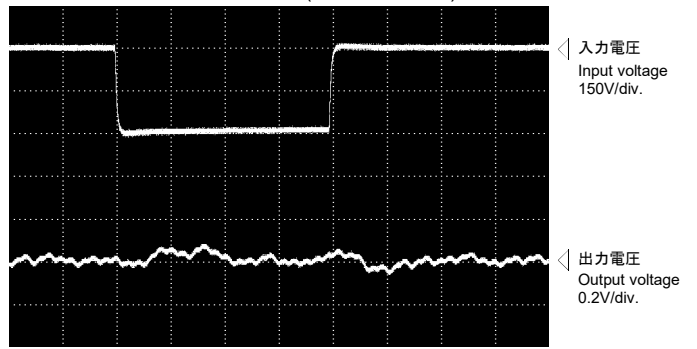
HM-Z003V12PP5

時間軸 Time base: 20μs/div.

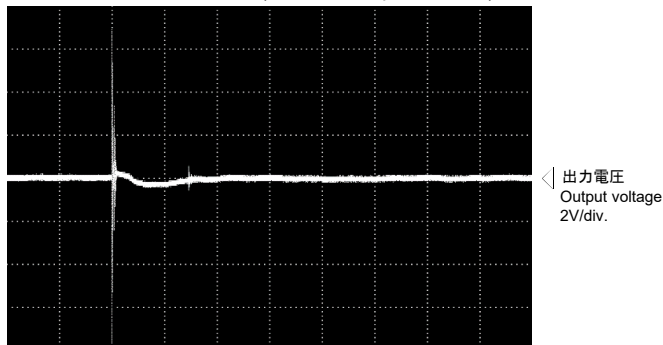
パルス電流応答特性  
Pulse current response characteristic



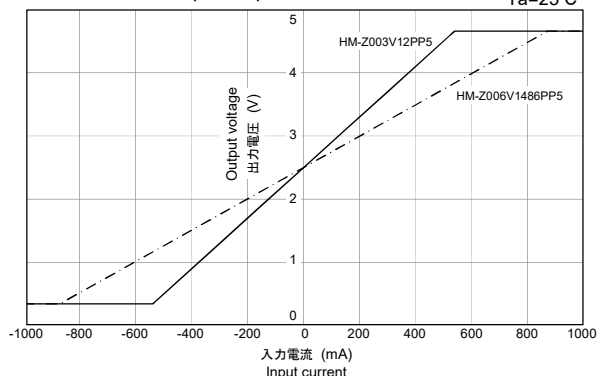
ノイズ特性 (dv/dtの影響)  
Noise characteristics (Effects of dv/dt)



ノイズ特性 (インパルスノイズの影響)  
Noise characteristics (Effects of impulse noise)



入-出力特性  
Input/output characteristics



注: "◁" は0Vまたは、0Aを示します。 The marks "◁" means 0V or 0A.