

TECHNICAL DATA  
DATA SHEET 1107, REV. A

**DC-DC Converters**  
**Fixed Input, 1000V Isolation, Unregulated, Single/Dual Output**

**FEATURES:**

- Isolation Voltage: 1000Vdc
- Isolation Resistance (1): 1000MΩ
- Short-Circuit Duration: 1 second
- Case Temperature Rise: Max. 25°C, Typ. 15°C
- Cooling Method: Free-Air Cooling
- Standby Power Dissipation: 1W (100mW), 2W (200mW)
- Operating Temp.: -40°C ~ +85°C
- Storage Temp.: -55°C ~ +125°C
- Humidity: ≤ 95%
- Soldering Temp. (2): 300°C
- Case Material: Non-Flammable Material (UL94-V0)
- Mean Time Before Failure: > 1,000,000 hours (Operating Temp. 25°C)

**M (U) Single/Dual Output-1W/2W Series Input Characteristics**

Part Number	Nominal Input Voltage	Input Voltage Range	Maximum Input Voltage*
M05XXH/GS/D1/2U	5Vdc	4.5~5.5Vdc	7Vdc
M12XXH/GS/D1/2U	12Vdc	10.8~13.2Vdc	15Vdc
M24XXH/GS/D1/2U	24Vdc	21.6~26.4Vdc	28Vdc

\* Voltage above this value may cause permanent damage to the device.

**M (U) Single/Dual Output-1W/2W Series Output Characteristics**

Parameter	MIN	TYP	MAX	Units
1W Output Power	0.25		1	W
2W Output Power	0.5		2	W
Line Regulation			± 1.2	%
Efficiency at 100% Load	65	75	85	%
Temperature Coefficient			0.03	%/°C
1W Ripple and Noise		75	150	mVp-p
2W Ripple and Noise		100	200	
Switching Frequency	80	100	150	kHz

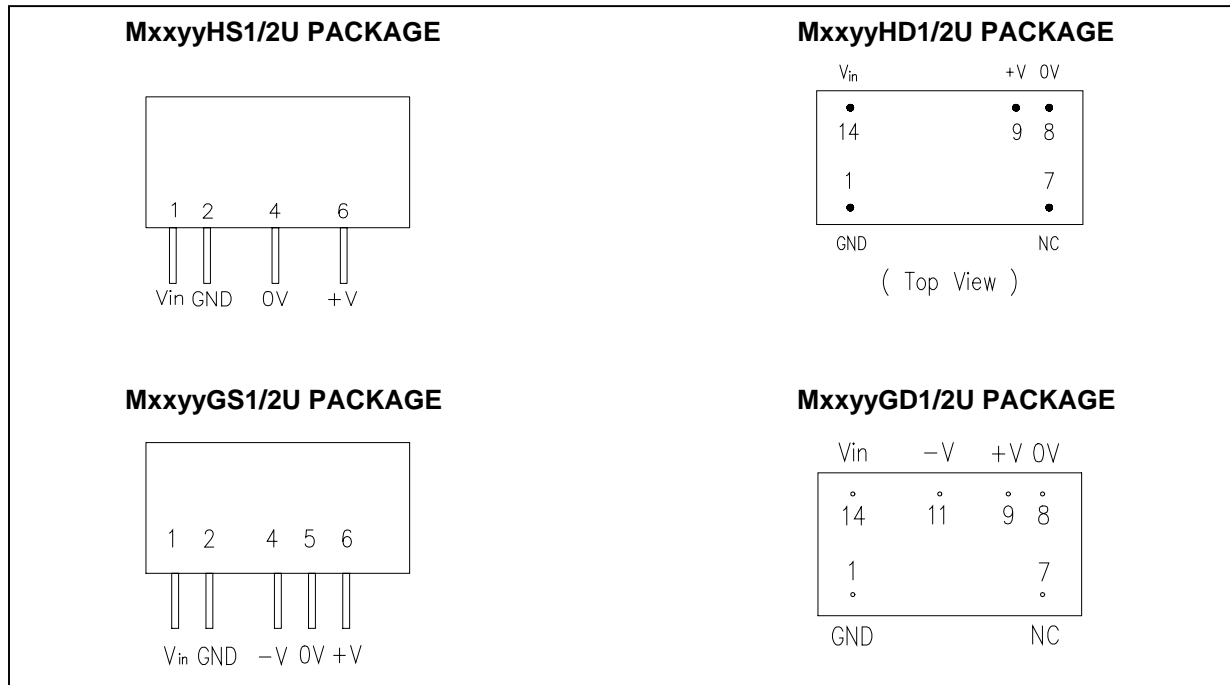
1. All specifications at T<sub>A</sub>=25°C, 75% of the humidity, Nominal input voltage, full output load unless otherwise specified.
2. Soldering for 10 seconds at 1.5mm away from the edge.

**TECHNICAL DATA**  
**DATA SHEET 1107, REV. A**

**M (U) Single/Dual Output-1W/2W Series Part Number List**

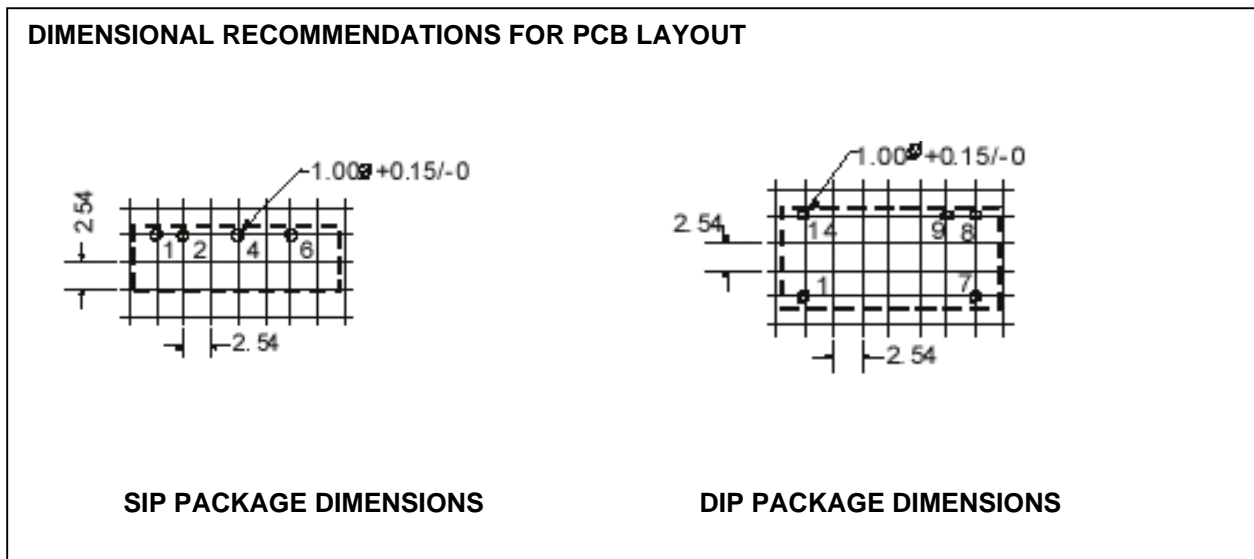
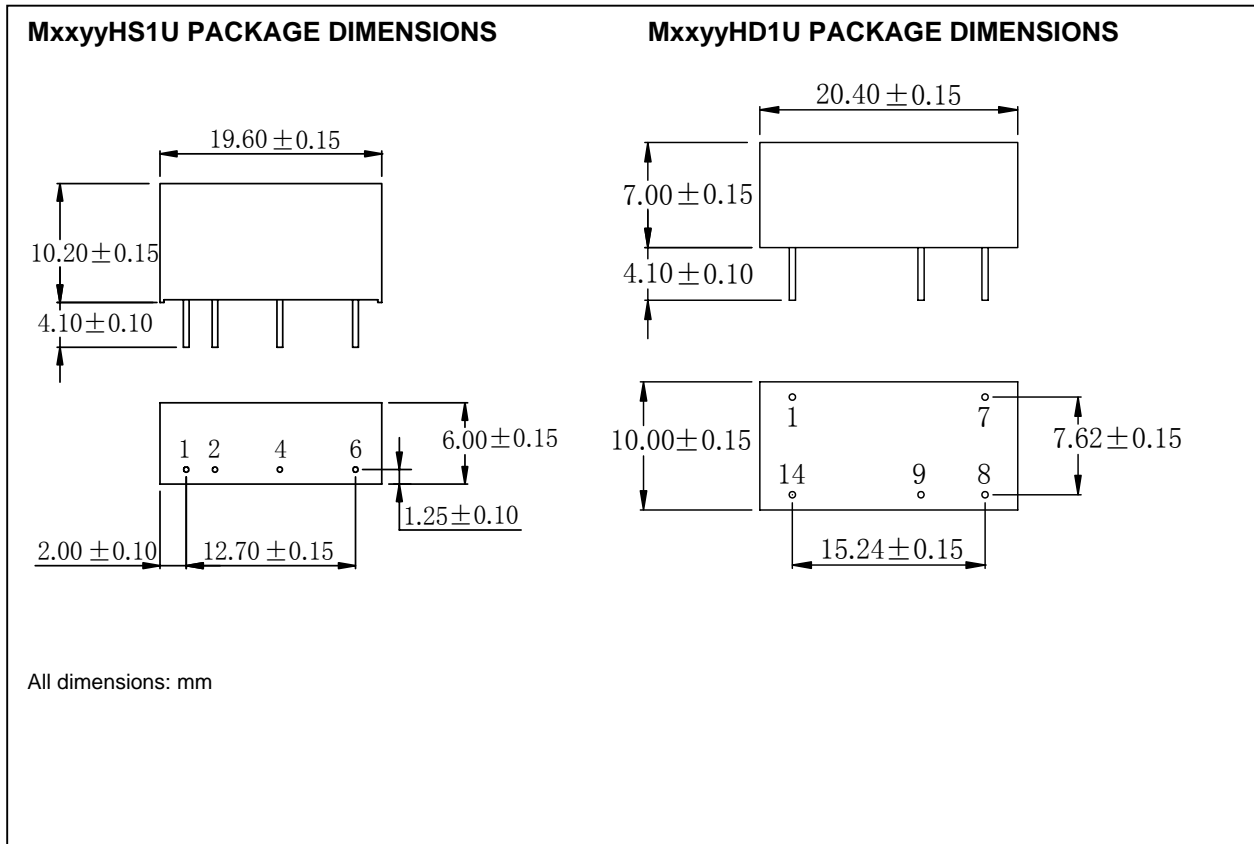
Input	Output	Power	SIP-1W	SIP-2W	DIP-1W	DIP-2W
5Vdc	5V/200m A	1.00W	M0505H/GS1U	M0505H/GS2U	M0505H/GD1U	M0505H/GD2U
	9V/112m A		M0509H/GS1U	M0509H/GS2U	M0509H/GD1U	M0509H/GD2U
	12V/84m A		M0512H/GS1U	M0512H/GS2U	M0512H/GD1U	M0512H/GD2U
	15V/67m A		M0515H/GS1U	M0515H/GS2U	M0515H/GD1U	M0515H/GD2U
12Vdc	5V/400m A	1.00W	M1205H/GS1U	M1205H/GS2U	M1205H/GD1U	M1205H/GD2U
	9V/224m A	1.00W				
	12V/168m A	1.00W				
	15V/134m A	1.00W				
	±5V/100m A	2.00W				
24Vdc	±9V/56m A	2.00W	M1212H/GS1U	M1212H/GS2U	M1212H/GD1U	M1212H/GD2U
	±12V/42m A	2.00W				
	±15V/33m A	2.00W				
	±5V/200m A	2.00W				
	±9V/111m A	2.00W				
	±12V/84m A	2.00W				
	±15V/67m A	2.00W				

**PIN CONFIGURATION**



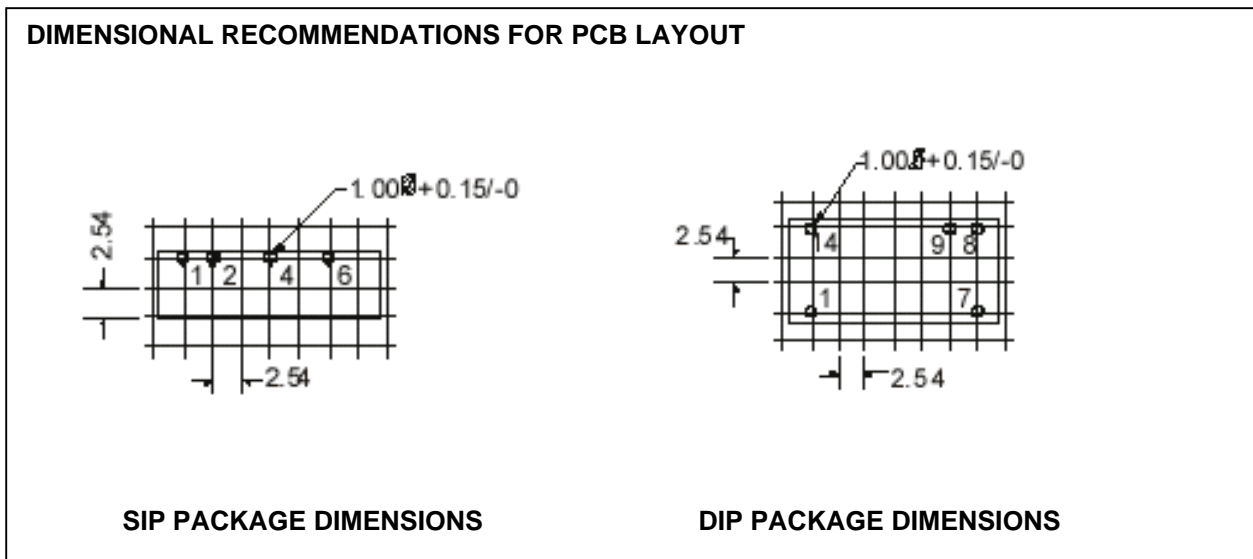
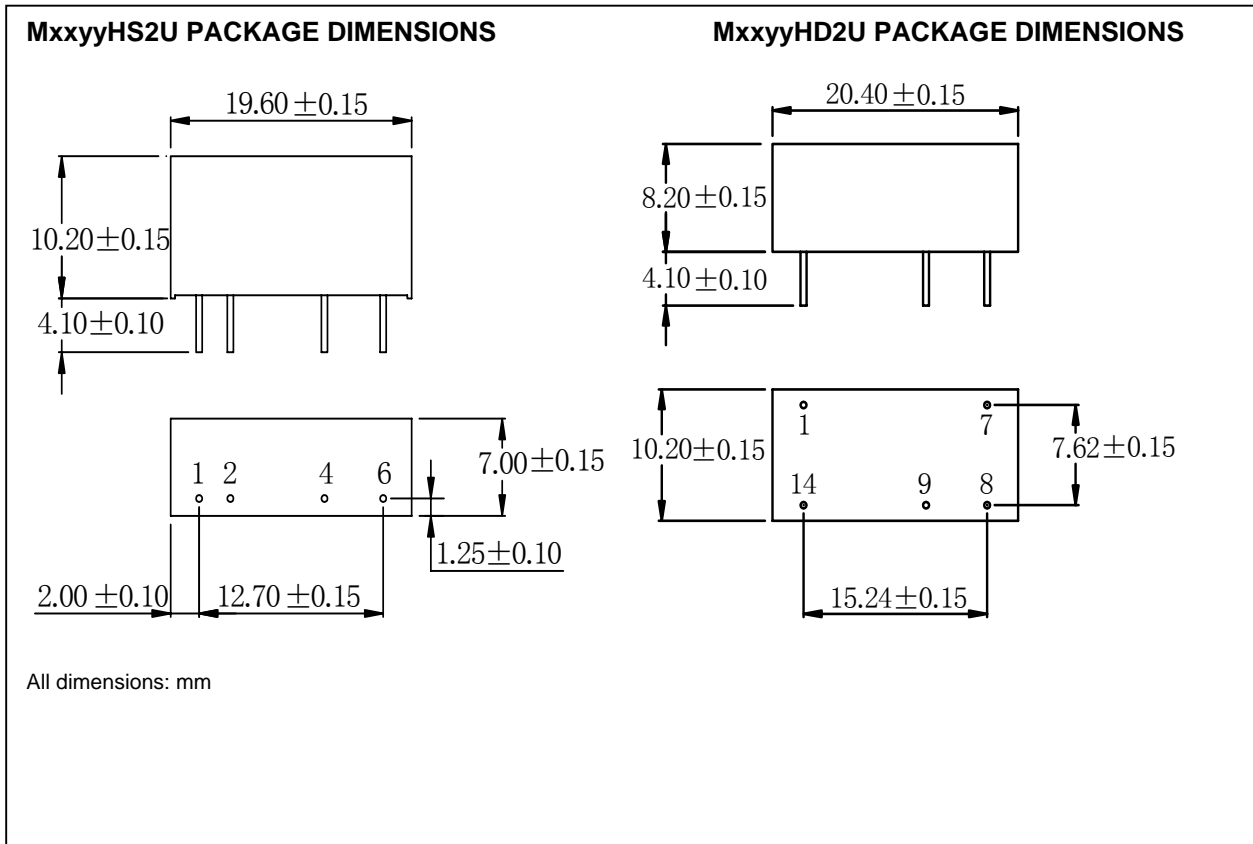
TECHNICAL DATA  
DATA SHEET 1107, REV. A

Mechanical Dimension: MxxyyHS/D1U



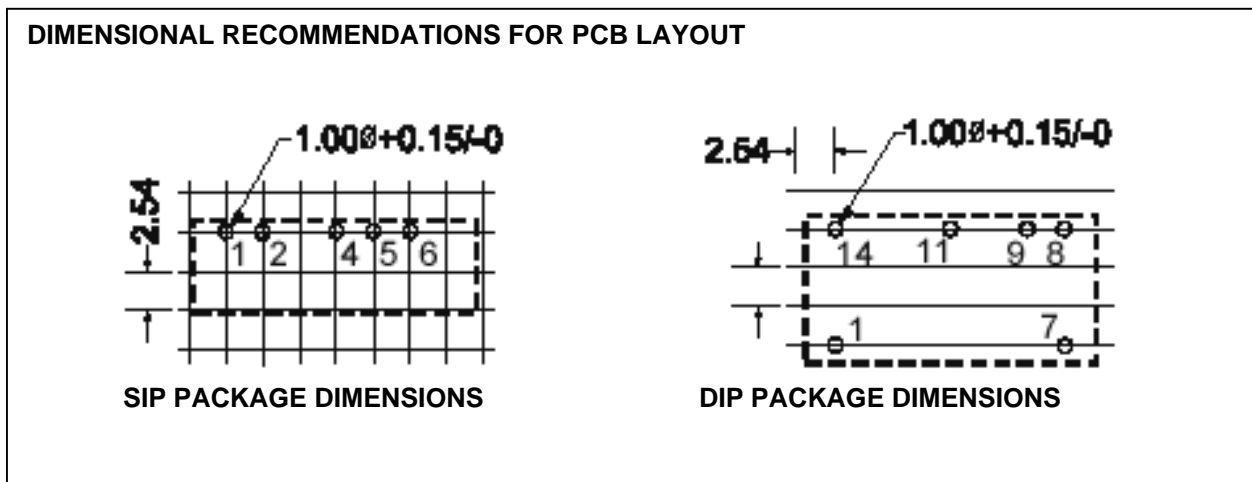
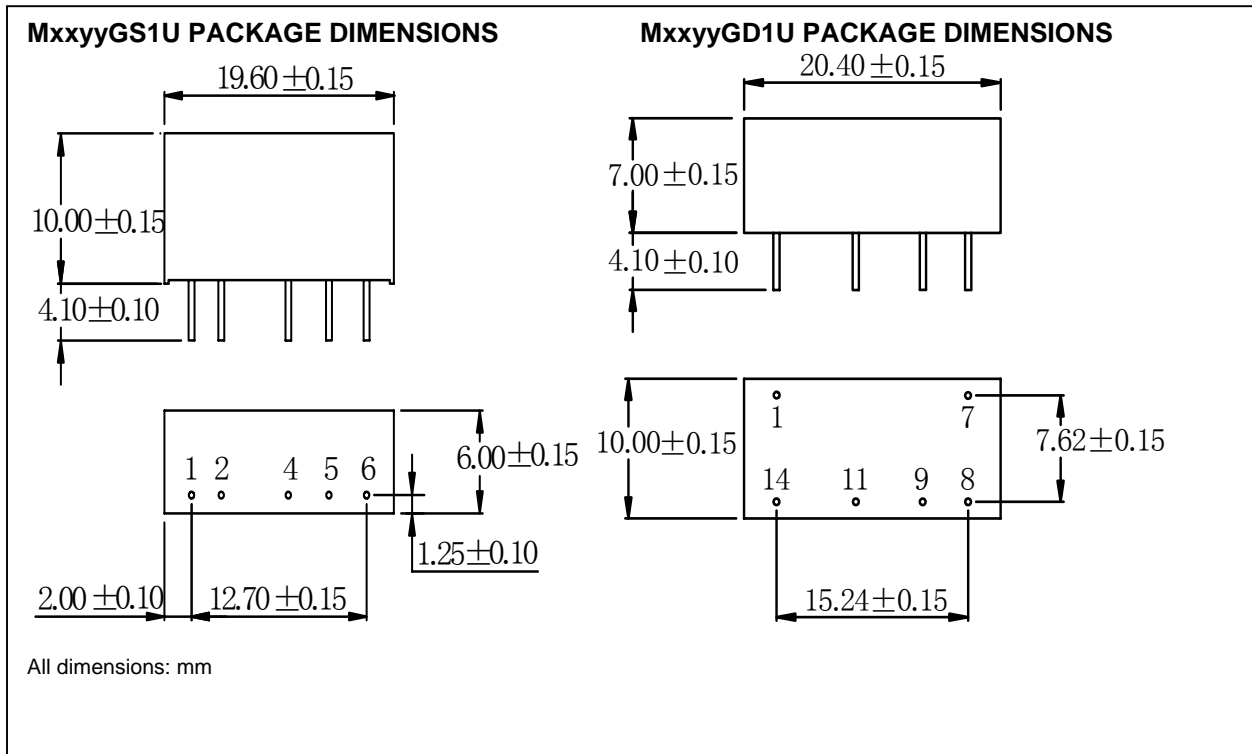
TECHNICAL DATA  
DATA SHEET 1107, REV. A

Mechanical Dimension: MxxyyHS/D2U



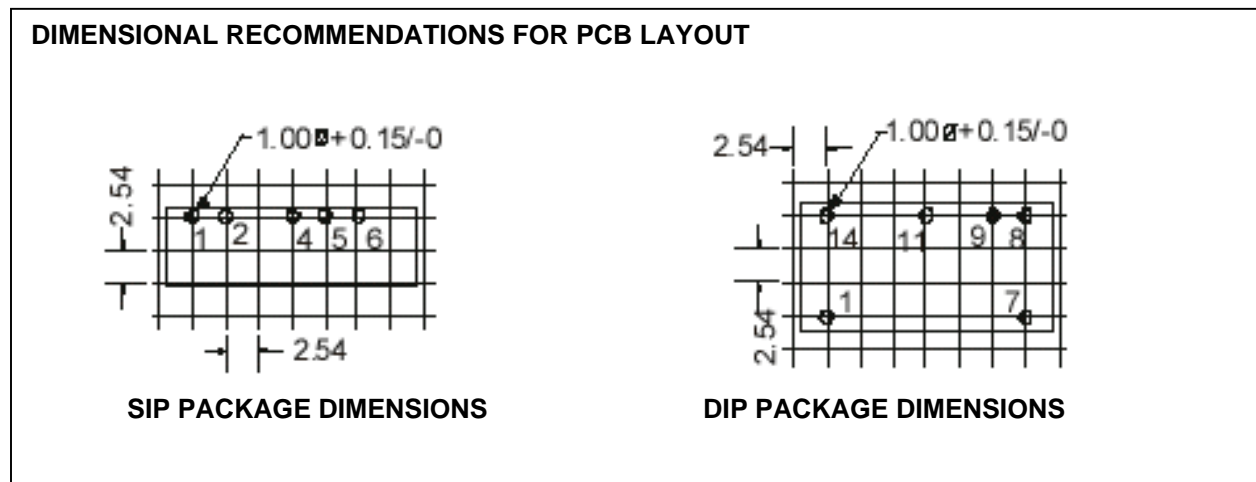
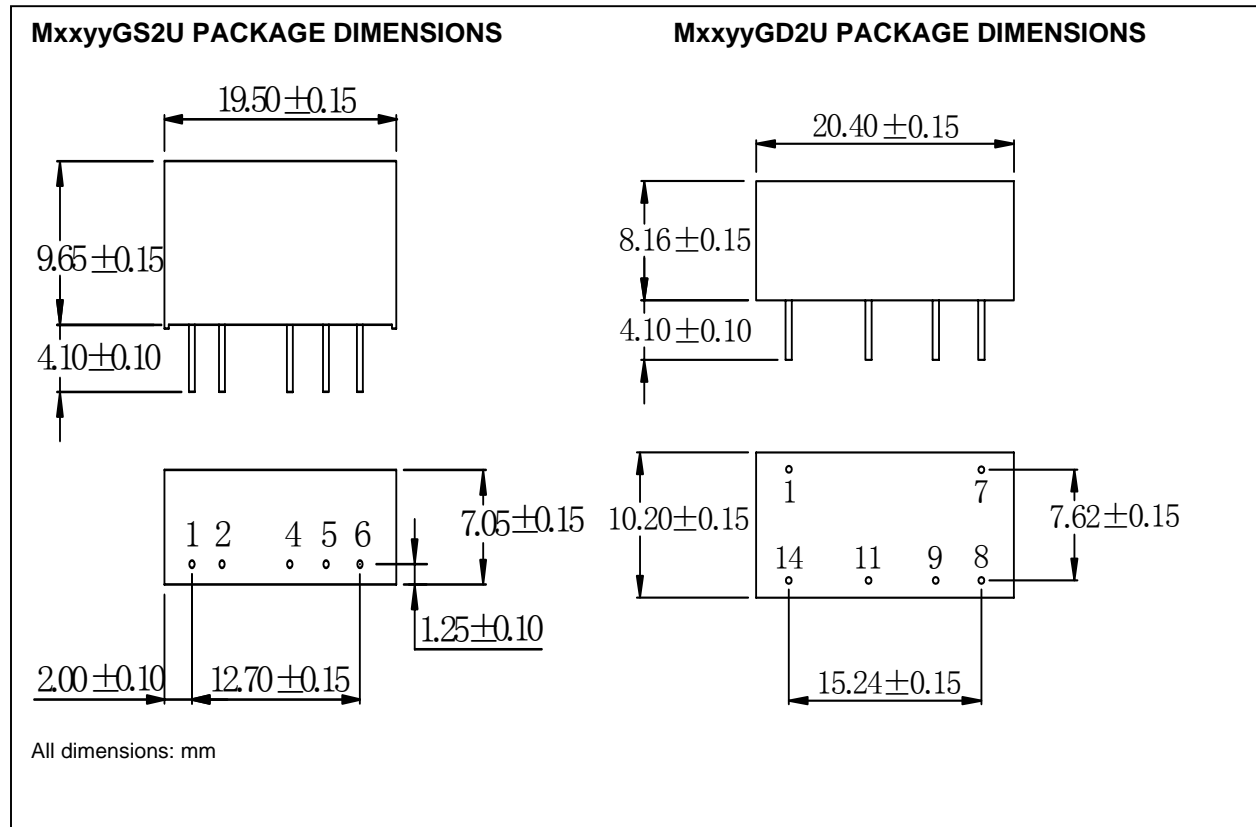
TECHNICAL DATA  
DATA SHEET 1107, REV. A

Mechanical Dimension: MxxyyGS/D1U



TECHNICAL DATA  
DATA SHEET 1107, REV. A

Mechanical Dimension: MxxyyGS/D2U



---

**TECHNICAL DATA**  
**DATA SHEET 1107, REV. A**

**DISCLAIMER:**

- 1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the Sensitron Semiconductor sales department for the latest version of the datasheet(s).
- 2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.
- 3- In no event shall Sensitron Semiconductor be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). Sensitron Semiconductor assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.
- 4- In no event shall Sensitron Semiconductor be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or Sensitron Semiconductor.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of Sensitron Semiconductor.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations.