

**Technical Data Sheet****Panduit Stainless Steel Marker Plates and Tags**

This specification is intended to outline the physical and chemical properties of *PANDUIT*'s stainless steel marker plates and tags and include the following material identifiers:

Part Number Prefixes	
MMP*	MT*

**PRODUCT SPECIFICATIONS:**

Description:	Material is RoHS compliant (European Union directive 2002/95/EC). Panduit stainless steel marker plates and tags provide permanent identification of pipes conduits, valves, cables and equipment in harsh environments.  These marker plates and tags deliver long life when exposed to chemicals, vibrations, radiation, weathering and extreme temperatures
Material:	304 and 316 grade stainless steel.
Marking Method:	Embossed and Laser Etched.
Thickness:	0.010 inch, 0.015 inch and 0.035 inch
Service Temperature Range:	-112°F to 1000°F (-80°C to 538°C)
Storage Conditions:	Store at 70°F (21°C) and 50% Relative Humidity.

**PERFORMANCE PROPERTIES:**

Embossed and laser etched marker plates and tags were tested for their performance properties. Unless otherwise noted results are for both marking methods.

PROPERTIES	TEST METHOD	PERFORMANCE
UV Resistance	1000 hours in Fluorescent UV Weatherometer ASTM G154	No visible change observed
Weatherability	1000 hours in Xenon Arc Weatherometer, ASTM G155, Cycle 1	No visible change observed
High Service Temperature	30 days at 538°C(1000°F)	Discoloration observed but markings still legible
Low Service Temperature	30 days at -80°C(-112°F)	No visible change observed
Salt Fog Resistance	2000 hours in 5% salt fog solution chamber ASTM B117	No visible change observed
Boiling Water Resistance	Soaked in boiling water for 1 hour	No visible change observed
Flame Resistance	Heated to cherry red	Discoloration observed but markings still legible
Liquid Nitrogen Resistance	Dipped in liquid nitrogen for 20 minutes	No visible change observed
Thermal Cycle Resistance	Heated to cherry red and then dipped in liquid nitrogen	Discoloration observed but markings still legible

**Technical Data Sheet****CHEMICAL RESISTANCE TEST:**

Embossed and laser etched marker plates and tags were tested for their chemical resistance properties. Unless otherwise noted results are for both marking methods.

<b>CHEMICAL</b>	<b>1 hour immersion</b>	<b>24 hour immersion</b>	<b>7 day immersion</b>
Water	NC	NC	NC
Isopropyl Alcohol	NC	NC	NC
Ethanol	NC	NC	NC
Gasoline	NC	NC	NC
Mineral Spirits	NC	NC	NC
Skydrol	NC	NC	NC
Motor Oil	NC	NC	NC
Acetone	NC	NC	NC
Methyl Ethyl Ketone	NC	NC	NC
Xylene	NC	NC	NC
25% Sodium Hydroxide	NC	NC	NC
20% Ammonium Hydroxide	NC	NC	NC
37% Hydrochloric Acid	Discolored but markings still legible	Discolored but markings still legible	Material Disintegrates
50% Sulfuric Acid	Discolored but markings still legible	Embossed marking discolored but legible. Laser etched marking is illegible	Embossed marking discolored but legible. Laser etched marking is illegible
Glacial Acetic Acid	NC	NC	NC

NC = No Change

**LIMITED WARRANTY**

All *PANDUIT* Identification Solution Products (except for Software programs) are warranted to be free from defects in material and workmanship at the time of sale but our obligation under this warranty is limited to replacement of the product proved to be defective within 6 months from the date of sale, or in the case of printers, within 90 days from the date of sale. This warranty is void if the products or printers are modified, altered or misused in any way. Use of *PANDUIT* printers with any product other than the specified *PANDUIT* products for which the printer was designed constitutes misuse. Before using, the user shall determine the suitability of the product for its intended use and user assumes all risk and liability whatsoever in connection therewith. The foregoing may not be altered except by an agreement signed by officers or seller and manufacturer.

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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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