

## DC SPD 24V 2-Pair, Compact DIN, Full-Mode Protection



### TSJ-24P2

#### Features

- UL 497B Listed
- Two-Stage SASD, GDT Full-Mode Protection
- Compact 12mm DIN-Rail Form Factor
- Field-Replaceable Plug-In Module (#TSJ-24P2-M)
- Signal Uninterrupted when Exchanging Module
- Grounding via DIN-Rail

#### Applications

- IRS-422 / RS-485 Serial Communication Lines
- Fieldbus / SCADA Networks
- RTUs, HMIs, PLC ports
- Building Automation Systems
- Security Systems & Alarm Panels
- Access Control Systems
- Telecom & Instrumentation Lines
- Serial Data Transmission up to 10 Mbps

#### Description

DC surge protector (also known as SPD or lightning protector) TSJ-24P2 from Transtector is a DIN-Rail style SPD that utilizes state of the art two-stage SASD, GDT technology to protect critical equipment that operates on a 24 Vdc electrical service. This surge protector provides effective protection against electrical transient surges that are generated both by external lightning events and by internal switching transients and supports long-term system reliability by safely shunting high amounts of transient energy while maintaining a very low clamp voltage. Transtector DC surge protectors are available in stock with same day shipping.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Service Voltages (DC)		24		Vdc
Current Rating			1	A
Maximum Continuous Operating Voltage (MCOV)				
MCOV DC			33	Vdc

#### Surge Protection Specification

Description	Minimum	Typical	Maximum	Units
Surge Protection Technology		SASD, GDT		
Surge Protection Modes		L-L, L-G		
Nominal Discharge Surge Current (In)		10		kA
8/20 $\mu$ s Surge Current Max			20	kA
10/350 $\mu$ s Surge Current		2.5		kA
VPL 8/20 $\mu$ s L-G			55	Vpk
Cutoff Frequency		100		MHz

#### Mechanical Specifications

##### Size

Height	2.91 in	[73.91 mm]
Width	0.47 in	[11.94 mm]
Depth	3.54 in	[89.92 mm]
Weight	0.15 lbs	[68.03 g]
Housing Material and Plating	ABS	

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#### Environmental Specifications

Temperature Range (Operational)	-40 to 85 deg C
Temperature Range (Storage)	-40 to 85 deg C
Environmental Protection Rating	IP20

#### Installation

Mount Type	DIN-Rail
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#### Compliance Certifications

ANSI Compliant	ANSI/IEEE C62.41 IEC 61643-21:2012
Certifications	UL497B

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [DC SPD 24V 2-Pair, Compact DIN, Full-Mode Protection TSJ-24P2](#)

Transtector Systems specializes in protection of highly sensitive, low voltage equipment through its patented, non-degrading silicon diode technology and custom filters. Our power quality expertise translates into a diverse product offering including AC, DC, and signal applications as well as integrated cabinets, power distribution panels and EMP hardened devices.

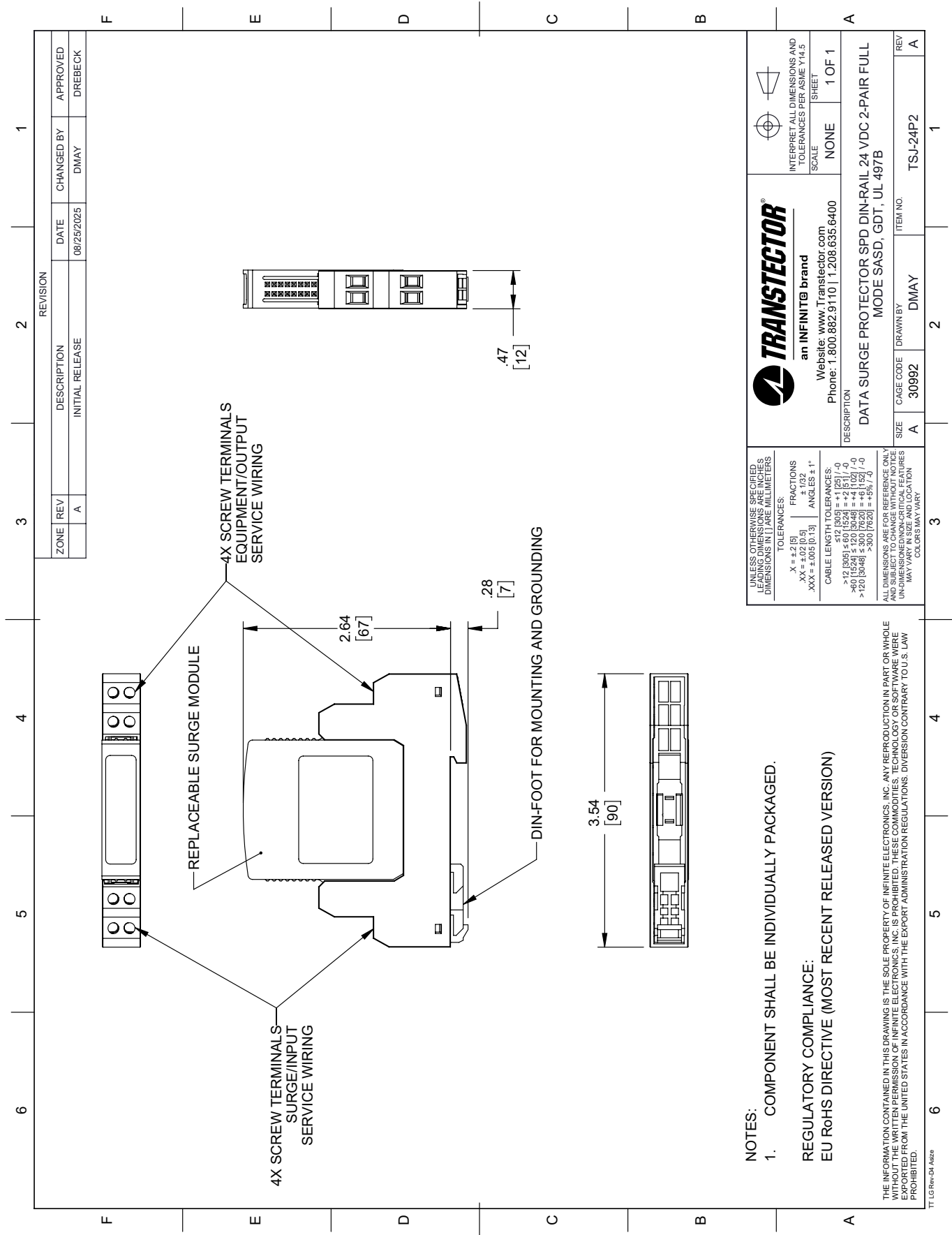
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URL: <https://www.transtector.com/dc-surge-protector-spd-indoor-din-rail-tsj-24p2-p.aspx>

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. Transtector reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Transtector does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Transtector does not assume liability arising out of the use of any part or document.

# TSJ-24P2 CAD Drawing

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ZONE		REVISION		DATE		APPROVED	
REV	DESCRIPTION	DATE	CHANGED BY	DATE	CHANGED BY	DATE	APPROVED
A	INITIAL RELEASE	08/25/2025	DMAY	DMAY	DMAY	DMAY	DREBECK

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE SHEET: 1 OF 1

DESCRIPTION: DATA SURGE PROTECTOR SPD DIN-RAIL 24 VDC 2-PAIR FULL MODE SASD, GDT, UL 497B

SIZE: A CAGE CODE: 30992 DRAWN BY: DMAY ITEM NO.: TSJ-24P2

UNLESS OTHERWISE SPECIFIED, DIMENSIONS IN PARENT BRACKETS ARE IN MILLIMETERS

TOLERANCES:  
FRACTIONS: X = ±.2 [5] XX = ±.02 [5] XXX = ±.005 [0.13]  
ANGLES: ±1°

CABLE LENGTH TOLERANCES:  
>12 [300] ≤ 60 [1524] = ±.5 [13]  
>60 [1524] ≤ 120 [3048] = ±.5 [13] / -0  
>120 [3048] ≤ 300 [7620] = ±.5 [13] / -0  
>300 [7620] = ±.5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. DIMENSIONS OF CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

- NOTES:
- COMPONENT SHALL BE INDIVIDUALLY PACKAGED.
- REGULATORY COMPLIANCE:  
EU RoHS DIRECTIVE (MOST RECENT RELEASED VERSION)

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TT LG Rev-D4 Asize