

BRADY L-2899-4C UHF SLIDES LABEL

TDS No. L-2899-4C
Effective Date: 12/04/2021

Description:

UHF RFID label for use on medical slides.

Details:

Material Specifications:

Face Material	B-481 - Polyester
Adhesive	Permanent modified acrylic adhesive
Finishing	Matte White
Antenna	Aluminium
IC to antenna construction	Chip bonded to antenna using Anisotropic Conductive Film adhesive
Tag base material	PET

General Specifications:

Applications	Pharmaceutical and healthcare. The RFID label is designed for used on medical slides in the laboratory environment.
Print Technology	Thermal transfer print, including RFID encoding.
Recommended Ribbon	Brady Series R6400
Operating Temperature	-40 °C to 85 °C
Regulatory/Agency Approvals	For information on the Weee-RoHS compliance status for a Brady Product go to one of the following websites: In Canada: www.bradycanada.ca/weee-rohs In Europe: www.bradyeurope.com/rohs In Japan: www.brady.co.jp/products/labelsuse/rohs All other regions: www.bradyid.com/weee-rohs

Electronic Specifications:

IC / Chip	Impinj Monza 4E
Operating Frequency	Global (860 – 960 MHz)
Supported Standard	ISO-18000-6C, EPC Class 1, Gen 2
EPC Memory	496 bit
User Memory	128 bit

Read Range: Up to 1 meter

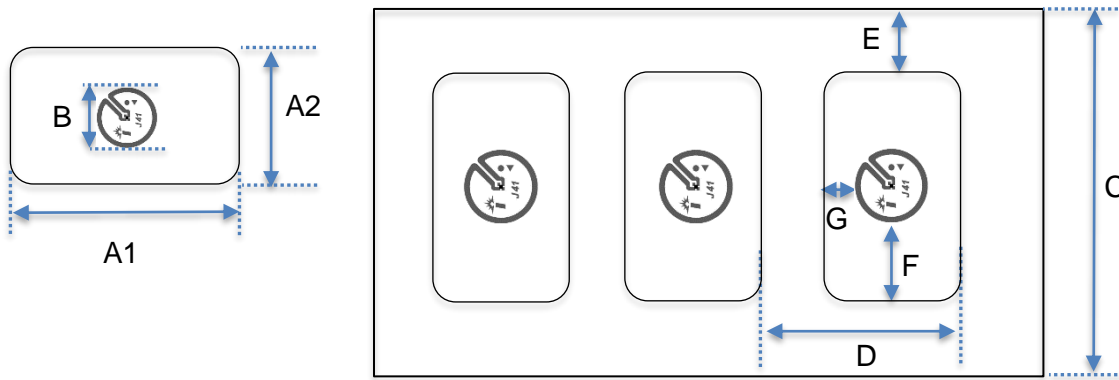
Label Dimensions:

Metric (mm)		
Width	Length	Thickness
24.00	16.00	0.29

Label Mass (including antenna and chip)

Label Mass (g)
0.09

Dimensions (mm)



		Length (mm)	Tolerance (mm)
A1	Tag Width	24.00	+/- 0.2
A2	Tag Length	16.00	+/- 0.2
B	Antenna Diameter	12.00	+/- 0.5
C	Web Width	38.10	+/- 0.5
D	Tag to Tag Pitch	20.00	+/- 1.5
E	Web edge to label	7.05	+/- 1.5
F	Antenna to side label	6.00	+/- 1.5
G	Antenna to top label	2.00	+/- 1.5

Delivery and Packaging Specifications

RFID labels per roll	500
Rolls in package	1
Winding	RFID labels out
Inspection and delivered tags	100% inspected, 500 good RFID labels per roll
Bad Tags Marked	Yes

Label Performance

Special Features

L-2899-4C, when printed with the Brady Series R6400 ribbon, is designed for use in the slide staining process and other laboratory identification. L-2899-4C performs well in the commonly used H & E (hematoxilin and eosin) slide staining process.

Details:

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 1000 -Total (excluding liner)	(0.0114 inch) 0.29 mm
Adhesion to: -Glass	ASTM D 1000 20 minute dwell 24 hour dwell	68 N/100mm (62 oz/inch) 90 N/100mm (82 oz/inch)
-Polypropylene	20 minute dwell 24 hour dwell	92 N/100mm (84 oz/inch) 88 N/100mm (81 oz/inch)

PERFORMANCE PROPERTIES		ENVIRONMENTAL RESISTANCE		
Samples were printed with the Brady Series R6400 ribbon. Printed samples were laminated to glass microscope slides and then exposed to the indicated environmental conditions.				
PERFORMANCE PROPERTIES	TEST METHODS	EFFECT TO LABEL	EFFECT TO PRINT IMAGE	EFFECT TO CHIP
High Service Temperature	30 days at temperatures 60°C, 85°C, and 100°C	No visible effect	No visible effect	Readable
Low Service Temperature	30 days at temperatures -40°C and -80°C	No visible effect	No visible effect	Readable
Humidity Resistance	30 days at 37°C, 80% relative humidity	No visible effect	No visible effect	Readable
Abrasion Resistance	Taber Abraser, CS-10 grinding wheels, 500 g/arm, 50 cycles	No visible effect	Print still legible after 50 cycles	No effect to chip. Chip still readable after 150 cycles

PERFORMANCE PROPERTIES		CHEMICAL RESISTANCE		
Samples were printed with the Brady Series R6400 ribbon. Printed samples were laminated to glass microscope slides and allowed to dwell 24 hours prior to testing. Testing consisted of 5 cycles of 10-minute immersions in the specified chemical followed by 30-minute recovery periods. After the final immersion the printed image was rubbed 10 times with a cotton swab saturated with the test fluid. Testing was conducted at room temperature.				
CHEMICAL REAGENT	EFFECT TO PRINT/TOPCOAT WITHOUT RUB	EFFECT TO PRINT/TOPCOAT WITH RUB	EFFECT TO ADHESIVE	EFFECT TO CHIPS
Acetone	1	1	1	Readable
Ethanol 96%	1	1	1	Readable
Isopropanol	1	1	1	Readable
Toluene	1	1	2	Readable
Xylene	1	1	2	Readable

Rating scale:

1=no visible effect

2=slight smear or print removal or adhesive oozing, detectable but minimal

3=moderate smear or print removal or adhesive oozing

4=severe smear or print removal or adhesive oozing

5=complete smear, print removal or topcoat removal (delamination) or adhesive oozing

Shelf Life:

Shelf life is two years from the date of receipt for this product as long as this product is stored in its original packaging in an environment below 80° F (27° C) and 60% RH. It remains the responsibility of the user to assess the risk of using this product. We encourage customers to develop testing protocols that will qualify a product's fitness for use in their actual application.

Trademarks:

ASTM: American Society for Testing and Materials (U.S.A.)

All S.I. Units (metric) are mathematically derived from the U.S. Conventional Units.

Note: All values shown are averages and should not be used for specification purposes.

Test data and test results contained in this document are for general information only and shall not be relied upon by Brady customers for designs and specifications, or be relied on as meeting specified performance criteria. Customers desiring to develop specifications or performance criteria for specific product applications should contact Brady for further information.

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Brady EMEA | Lindestraat 20 | 9240 Zele | Belgium | Tel: +32 (0) 52 45 78 11 | Fax: +32 (0) 52 45 78 12