AD Burst M850

Overview

Frequency Band
UHF 860 - 960 MHz

Chip
Impinj M850

IC Attachment Technology
Direct Chip Attach
Strap Attach

Antenna Dimensions
70 x 10.5 mm / 2.756 x 0.413 in

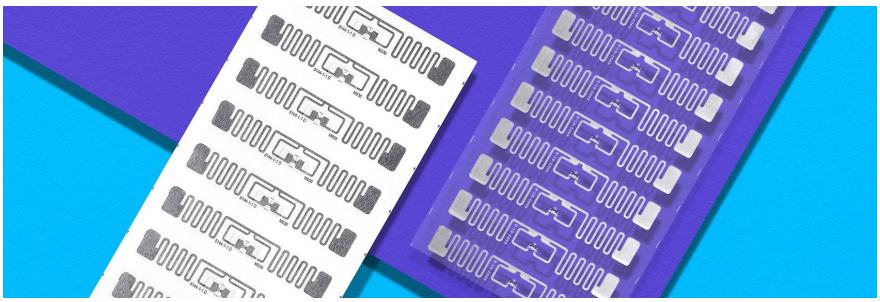
International Standard
ISO/IEC 18000-63 Type C

Industry Segments
Retail Apparel
General Retail
Industrial Applications

Applications
Brand Protection
Supply Chain Management
Home Essentials

RoHS
EU Directive 2011/65/EU and 2015/863 Compliant

REACH
Regulation (EC) No. 1907/2006



Excellent performance on a wide variety of RFID tagging applications

AD Burst M850 by Avery Dennison Smartrac is the first UHF RFID inlay from the company's expansive portfolio to feature the Impinj M800 series IC. The globally tuned inlay has been designed to achieve outstanding performance in a wide range of apparel, general retail and industrial applications and boasts a slimmed down version of the widely popular and long standing staple, AD Belt. The new design carries a 73 x 13.5mm (2.87 x 0.53in) footprint and is available in multiple delivery formats including dry inlay, wet inlay, and pressure sensitive label.

Although AD Burst M850 is optimized for maximum performance in a traditional retail apparel setting, its strong versatility across a variety of dielectrics makes the globally tuned inlay a viable option for industry applications. In addition, the design is a strong performer in the general retail market for tagging item and case level merchandise.

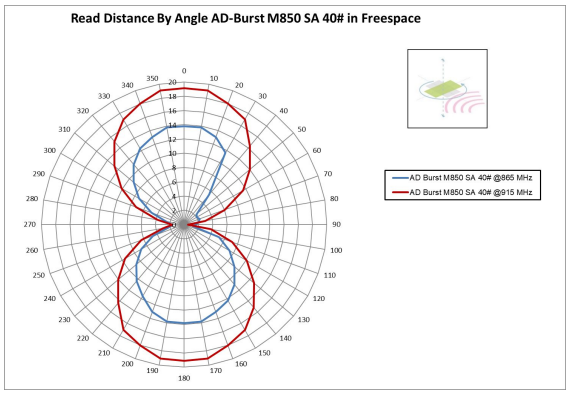
AD Burst M850 inlays feature 96-bit of EPC memory and 32-bit of user memory and a 96-bit unique factory locked TID number. A 48-bit unique serial number is factory-encoded into the TID. The improved readability of the new IC offers reliable reading of small tags at high volume and speed which supports the global IoT deployments.

Like all RFID products from Avery Dennison, AD Burst M850 inlays are compliant with ISO 9001:2015 Quality Management and ISO 14001:2015 Environmental Management, which ensure a reliable and state-of-the-art product that meets a variety of application needs, especially in the retail environment. The RFID Lab at Auburn University has awarded Avery Dennison its first comprehensive and significant ARC accreditation for quality.

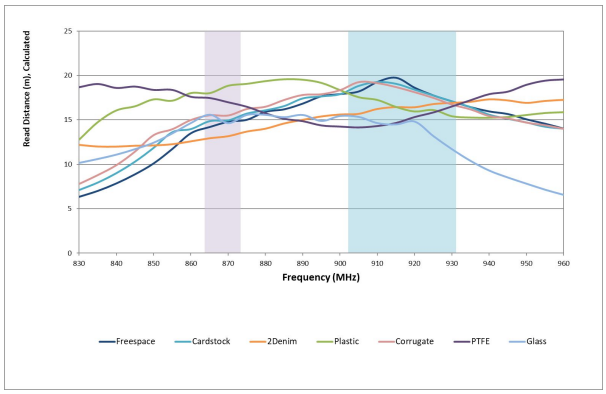
Technical features - Strap Attach (SA)

Chip / IC Attachment Technology	Impinj M850 / Strap Attach					
EPC and User Memory	96-bit and 32					
TID Memory	96-bit / 48-bit unique serial number					
Product Code	IL-609954	IL-609955	IL-610591	IL-610638	IL-609956	IL-610356
Delivery Format	Dry inlay +	Wet inlay	Wet inlay	Wet inlay	Label	Label
Die-Cut Dimension		73 x 13.5 mm / 2.874 x 0.532 in	73 x 13.5 mm / 2.874 x 0.532 in	73 x 13.5 mm / 2.874 x 0.532 in	73 x 13.5 mm / 2.874 x 0.532 in	73 x 13.5 mm / 2.874 x 0.532 in
Inlay Substrate	40# Paper	40# Paper	40# Paper	40# Paper	40# Paper	40# Paper
Face Sheet	-	-	-	-	TT2C	TT2C
Total Thickness (with chip and release liner)	11.5 - 13.5 mils / 292 - 343 microns	12.7 - 14.7 mils / 322 - 373 microns	12.7 - 14.7 mils / 322 - 373 microns	12.7 - 14.7 mils / 322 - 373 microns	16.2 - 18.2 mils / 411 - 462 microns	16.2 - 18.2 mils / 411 - 462 microns
Standard Pitch	19.05 mm / 0.75 in	19.05 mm / 0.75 in	19.05 mm / 0.75 in	19.05 mm / 0.75 in	19.05 mm / 0.75 in	25.4 mm / 1 in
Web Width	82.55 mm / 3.25 in	82.55 mm / 3.25 in	82.55 mm / 3.25 in	82.55 mm / 3.25 in	82.55 mm / 3.25 in	76.2 / 3 in
Core Size	76 mm / 3 in	76 mm / 3 in	76 mm / 3 in	76 mm / 3 in	76 mm / 3 in	76 mm / 3 in
Quantity / Reel	17,912 pcs/reel	11,377 pcs/reel	TBD pcs/reel	TBD pcs/reel	3,154 pcs/reel	2,366 pcs/reel
Size of Roll	MAX OD: 15.5”	MAX OD: 13”	MAX OD: TBD	MAX OD: TBD	MAX OD: 8”	MAX OD: 8”
Operating Temperature	-40 °C to 85 °C / -40 °F to 185 °F					
On-Metal	Non metal					
Certificate	ARC Specification Guide					

Orientation Sensitivity



Read Range



All graphs are indicative: performance in real life applications may vary.

Contact information
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Warranty: Please refer to Avery Dennison standard terms and conditions: **rfid.averydennison.com/termsandconditions**

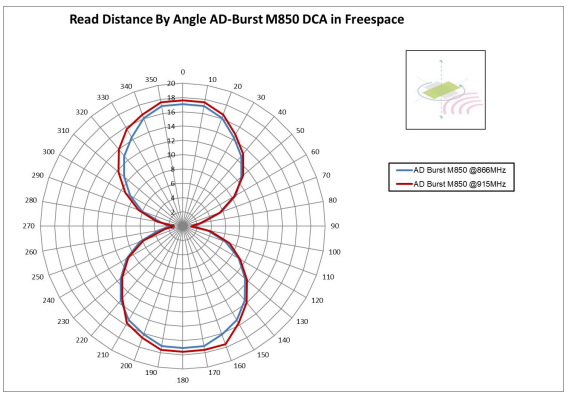
Care and handling: RFID inlays are sensitive to ESD. Observe standard industry practices relating to electronics / RFID to keep environmental impact and static charge to a minimum.

Applications: This product should be tested by the customer / user thoroughly under end use conditions to ensure the product meets the particular requirements. Avery Dennison does not represent that this product is fit for any particular purpose or use. Avery Dennison reserves the right to modify, change, supplement or discontinue product offerings at any time without notice. The information contained herein is believed to be reliable but Avery Dennison makes no representation concerning the accuracy or correctness of the data.

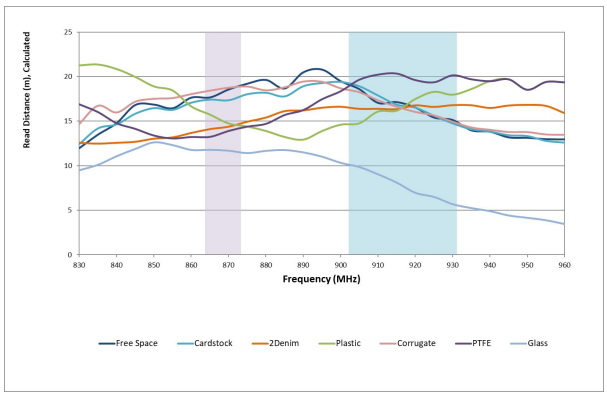
Technical features - Direct Chip Attach (DCA)

Chip / IC Attachment Technology	Impinj M850 / Direct Chip Attach		
EPC and User Memory	96-bit EPC and 32-bit UM		
TID Memory	96-bit / 48-bit unique serial number		
Product Code	IL-610202	IL-610203	IL-610204
Delivery Format	Dry inlay	Wet inlay	Label
Die-Cut Dimension	-	73 x 13.5 mm / 2.874 x 0.531 in	73 x 13.5 mm / 2.874 x 0.531 in
Inlay Substrate	PET	PET	PET
Face Sheet	-	-	Mid-gloss paper
Total Thickness (with chip and release liner)	7.05 mils / 179 microns	7.68 mils / 195 microns	10.23 mils / 260 microns
Standard Pitch	15.88 mm / 0.625 in	15.88 mm / 0.625 in	15.88 mm / 0.625 in
Web Width	82.55 mm / 3.25 in	82.55 mm / 3.25 in	82.55 mm / 3.25 in
Core Size	76 mm / 3 in	76 mm / 3 in	76 mm / 3 in
Quantity / Reel	20,000 pcs/reel	20,000 pcs/reel	5,000 pcs/reel
Size of Roll	MAX OD: 15.5”	MAX OD: 13”	MAX OD: 8”
Operating Temperature	-40 °C to 85 °C / -40 °F to 185 °F		
On-Metal	Non metal		
Certificate	ARC Specification Guide		

Orientation Sensitivity



Read Range



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