

3M™ RFID D4C Label – Technical Data Sheet

58 mm x 58 mm (2.3" x 2.3")

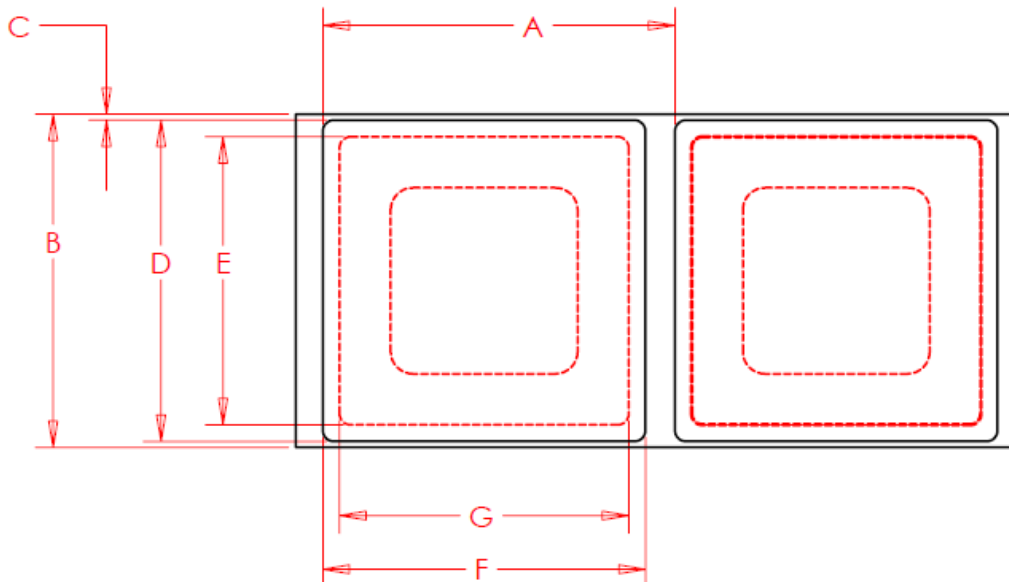
75-4700-2660-2

Description

This RFID label is provided as a 58 mm square pressure sensitive label on a silicon paper liner. The labels are wound on a single label width roll. The integrated circuit operates at 13.56 MHz in compliance with ISO 18000-3 Mode 1 and ISO 15693. The integrated circuit incorporates a 1024 bit memory.

Dimensions

A	Label to label pitch	63.5 mm (2.5")
B	Web width	63.5 mm (2.5")
C	Web edge to label	1.1 mm (0.04")
D	Label width	58 mm (2.3")
E	RFID antenna width	52 mm (2.0")
F	Label length	58 mm (2.3")
G	Antenna length	52 mm (2.0")
	Label thickness over antenna (without IC)	0.25 mm (0.01")
	Label thickness (maximum with IC)	0.50 mm (0.02")
	Core inside diameter	76 mm (3")
	Maximum roll diameter	185 mm (7.3")



3M™ RFID D4C Label

Electronic Specifications

Integrated circuit	NXP ICODE SLI - SL2 ICS20
Operating frequency	13.56 MHz
Supported standards	ISO 18000-3 Mode 1, ISO 15693-3
Read/Write cycles	Unlimited number of read cycles; up to 100,000 write cycles
Read rate	Up to 50 labels per second – dependent on application
Anti-collision	Yes - Linear Algorithm
Memory format	1024 bits – 896 bits user programmable
Read range	Dependent on reader power and reader antenna
Data rate	26 kb/s per ISO 18000-3 Mode 1 Specification

Material Specifications

Face material	Opaque transfer paper
Adhesive	3M Acrylic Adhesive
Adhesive PH	6.0 to 7.5 pH units
Antenna	Copper
Integrated circuit connection to antenna	Integrated circuit ultrasonically welded to Flip Chip Package; Flip Chip Package mechanically crimped to antenna
Antenna base material	PET (Polyethylene terephthalate)
Black security coating	No
Printability	Thermal transfer printable – Zebra Technologies Corporation TLP2844-Z

General Specifications

Operating temperature	-20 C to 70 C (-4 F to 158 F)
Storage temperature	15 C to 25 C (59 F to 77 F) and 40% to 60% relative humidity
Storage life	1 year – label on liner
Reliability testing	65 C (149 F) / 95%RH for 15 weeks
ESD voltage immunity	+/- 2 kV peak
Bending diameter	>60 mm, tension less than 10 N

Delivery and Packaging Specifications

Labels per roll	1000
Rolls in package	3
Winding	Label face out
Inspection and delivered labels	100% inspection, 1000 good labels per roll
Bad labels marked	No
Warranty	Please contact your local 3M sales representative for warranty information