

### product type designation



### MDS D421 transponder

Transponder MDS D421 for RF200/RF300 ISO tool pill in metal, ISO 15693, Chip type FUJITSU MB89R118, 2000 byte FRAM user memory 10x 4.5 mm (DxH); Minimum order quantity 10 units.

### suitability for operation

RF200, RF300

### radio frequencies

operating frequency / rated value	13.56 MHz
range / maximum	8 mm; range is reader dependent: observe <a href="http://support.automation.siemens.com/WW/view/en/67384964">http://support.automation.siemens.com/WW/view/en/67384964</a>
protocol / with radio transmission	ISO 15693
transfer rate / with radio transmission / maximum	26.5 kbit/s
product feature / multitag-capable	Yes

### electrical data

product component / backup battery	No
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### memory

type of memory	FRAM
storage capacity / of the user memory	2000 byte
type of memory organization	UID (fixed code) 8 bytes, user memory 2000 bytes, configuration memory 40 bytes
number of read cycles / at ambient temperature < 40 °C / maximum	1E+12
number of write cycles / at ambient temperature < 40 °C / maximum	1E+12
data retention time / at ambient temperature < 40 °C / not less than	10 a
property of memory	Block-by-block write protection of the user memory
type of transponder chip used	Fujitsu MB89R118

### mechanical data

material	Epoxy resin
color	black
mounting distance / relating to metal surfaces / recommended / minimum	0 mm

### ambient conditions

ambient temperature	
<ul style="list-style-type: none"> <li>during read/write access</li> <li>outside the read/write area</li> <li>during storage</li> </ul>	-25 ... +85 °C -40 ... +100 °C -40 ... +100 °C
protection class IP	IP67/IPx9K
shock resistance	According to DIN EN 60721-3-7 Class 7 M3
shock acceleration	1000 m/s <sup>2</sup>
vibrational acceleration	200 m/s <sup>2</sup>

### design, dimensions and weights

height	4.5 mm
diameter	10 mm

net weight	1 g
fastening method	gluing
<b>product features, product functions, product components / general</b>	
product feature	
• silicon-free	Yes
• printable	No
<b>standards, specifications, approvals</b>	
certificate of suitability	
• IECEx	No
<b>further information / internet-Links</b>	
Internet-Link	
• to web page: selection aid TIA Selection Tool	<a href="https://support.industry.siemens.com/cs/ww/en/view/67384964">https://support.industry.siemens.com/cs/ww/en/view/67384964</a>
• to website: Industrial communication	<a href="http://www.siemens.com/ident/rfid">http://www.siemens.com/ident/rfid</a>
• to website: Industry Mall	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
• to website: Information and Download Center	<a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>
• to website: Image database	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
• to website: CAx-Download-Manager	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
<b>last modified:</b>	2/10/2022 