

product type designation

RF680T transponder

SIMATIC RF680T 130x 32x 15 mm (LxWxH) ISO18000-63 frequency 865 to 928 MHz NXP G2 XM EPC ID 30 byte/240 bit user-memory 64 byte/512 bit printing not possible On-Metal -40 °C to +220 °C IP68/IPx9K range 5 m 10 units/pack 10 units MOQ



suitability for operation

RF600

radio frequencies

operating frequency	865 ... 928 MHz
range / maximum	5 m; observe system manual RF600: overrange is possible, range is reader dependent: observe http://support.automation.siemens.com/WW/view/en/67384964
protocol / with radio transmission	EPCglobal Class 1 Gen 2 / ISO 18000-63
transfer rate / with radio transmission / maximum	320 kbit/s
product feature / multitag-capable	Yes
polarization	Linear

electrical data

product component / backup battery	No
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memory

type of memory	EEPROM
storage capacity / of the user memory	64 byte
type of memory organization	EPC memory 96 bit (12 byte) assigned with sequential identifier and expandable up to 240 bit (30 byte), user memory 512 bit (64 byte), TID memory 64 bit (8 byte)
number of read cycles / at ambient temperature < 40 °C / maximum	1E+14
number of write cycles / at ambient temperature < 40 °C / maximum	100000
data retention time / at ambient temperature < 40 °C / not less than	10 a
property of memory	lock, unlock, write protection, password protection
type of transponder chip used	NXP G2XM

mechanical data

material	PPS
color	black
tightening torque / of the screw for securing the equipment / maximum	1 N·m
mounting distance / relating to metal surfaces / recommended / minimum	0 mm

ambient conditions

ambient temperature	
<ul style="list-style-type: none"> during read/write access outside the read/write area during storage 	<p>-25 ... +100 °C</p> <p>-40 ... +220 °C</p> <p>-40 ... +100 °C</p>
ambient condition / for operation	Operating temperature permanent up to 140 °C, for 5000 hours or 3000 cycles up to 200 °C, for 2000 hours or 1500 cycles up to 220 °C
protection class IP	IP68/IPx9K
shock resistance	According to DIN EN 60721-3-7 Class 7 M3

shock acceleration	1000 m/s ²
vibrational acceleration	200 m/s ²
resistance to mechanical stress	Torsion and bending stress not permissible
design, dimensions and weights	
width	32 mm
height	15 mm
depth	130 mm
net weight	50 g
fastening method	2 x M6 screws
product features, product functions, product components / general	
product feature	
• silicon-free	Yes
• printable	No
standards, specifications, approvals	
certificate of suitability	
• IECEX	No
MTBF	1940 a
further information / internet links	
internet link	
• to web page: selection aid TIA Selection Tool	https://support.industry.siemens.com/cs/ww/en/view/67384964
• to website: Industrial communication	http://www.siemens.com/ident/rfid
• to website: Industry Mall	https://mall.industry.siemens.com
• to website: Information and Download Center	http://www.siemens.com/industry/infocenter
• to website: Image database	http://automation.siemens.com/bilddb
• to website: CAx-Download-Manager	http://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com

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