Data sheet

UHF Transponder, rectangular, on-metal & high-temp FCC

UHF transponders

RFID TRANSPONDERS

SICK
Sensor Intelligence.

Ordering information

Type	part no.
UHF Transponder, rectangular, on-metal & high-temp FCC	6053159

Other models and accessories ➜ www.sick.com/UHF_transponders

Detailed technical data

Features

Type	Hardtag
Frequency band	UHF (860 MHz ... 960 MHz)
Carrier frequency	902 MHz ... 928 MHz
RFID standard	EPCglobal UHF Class 1 Generation 2, ISO/IEC 18000-6 C
Read range	
RFU61x	70 cm [1]
RFU62x	100 cm [1]
RFU63x/RFU65x	500 cm [1]
Special features	On Metal [2] High Temperature
IC type	Alien Higgs 3
Memory capacity (UII / user memory)	96/512 Bit
IC write cycle	≤ 100,000
IC data retention time	< 10 years

[1] Typical value; actual value depends on environmental conditions.

[2] For optimal performance the transponder must be mounted directly onto metal. The metal surface must be of at least the same size as the transporter.

Mechanics/electronics

Housing	Nylon
Housing color	Gray
Enclosure rating	IP68
Weight	26 g
Dimensions (L x W x H)	36.3 mm x 51 mm x 7.5 mm
Hole	3.2 mm
Design	Rectangular
Mounting method	Screws, Rivets
ATEX marking	✓

Ambient data

Ambient operating temperature	–40 °C ... +85 °C [1]
Application temperature	+ 220 °C, 30 min, 1,000 [2] + 250 °C, 30 min, 600 [2]
Storage temperature	–40 °C ... +85 °C

[1] Max. temperature at which the RFID transponder can interact with the RFID read/write device.

[2] Max. temperature the RFID transponder can withstand [maximum temperature; duration; cycles]. For optimal performance, the transponders should completely cool off before a new temperature cycle is started.

Classifications

ECLASS 5.0	27280401
ECLASS 5.1.4	27280401
ECLASS 6.0	27280401
ECLASS 6.2	27280401
ECLASS 7.0	27280401
ECLASS 8.0	27280401
ECLASS 8.1	27280402
ECLASS 9.0	27280402
ECLASS 10.0	27280402
ECLASS 11.0	27280402
ECLASS 12.0	27280402
ETIM 5.0	EC002593
ETIM 6.0	EC002998
ETIM 7.0	EC002998
ETIM 8.0	EC002998
UNSPSC 16.0901	52161523

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com