Dot XS

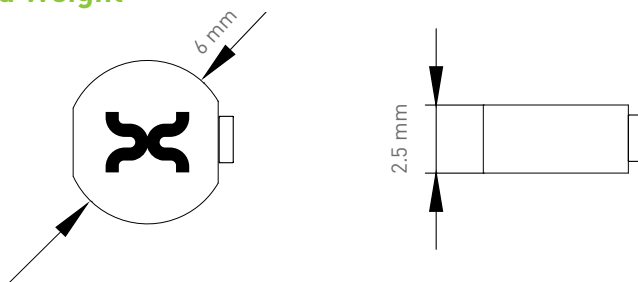| STANDARD	HIGH TEMPERATURE	AUTOCLAVABLE

Functional Specifications

RF air protocol	EPC Class 1 Gen 2; ISO18000-6C
Operating frequency	UHF 902-928 MHz (US); 866-868 MHz (EU)
IC type	Alien Higgs-3
Memory configuration	96-bit EPC; 512-bit user memory; 64-bit TID
Functionality	Read / write (user programmed)
Memory – expected read / write cycles	100,000 cycles at 77°F (25°C)
Data retention	Up to 50 years [1]
Read rate	400 tags per second for 96-EPC bit number
Warranty (limited)	1 year

Environmental and Industry Compliance

RoHS	EU Directive 2002/95/EC
CE	Yes
ATEX	ATEX Compliant

Product Dimensions and Weight

Dimensions (mm)	ø 6 x 2.5
tolerance	+/- 0.2
Dimensions (in)	ø 0.24 x 0.1
tolerance	+/- 0.008
Weight	0.016 oz (0.44 g)

[1] The chip data retention is based on chip operating under general environment conditions.

For product inquiries: sales@xerafy.com   www.xerafy.com   Datasheet: 11.11.15

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Dot-On XS

STANDARD	HIGH TEMPERATURE

Performance Characteristics

Read range on metal (2W ERP) [2]	Up to 5 ft (1.5 m)
Polarization	Linear

Physical Specifications

Material	Ceramic
Mounting system	Epoxy, injection mould
Paint color	Black
Logo color	Grey

Operational and Environmental Specifications

Shock (drop)	3 ft (1 m) to concrete/granite up to 200 cycles
Vibration	MIL-STD-810F
Compression strength	Packaging dependent
IP classification	IP 68
Humidity	
Operational humidity	5%-95% non-condensing
Storage humidity	5%-95% non-condensing
Operational temperature	
Cold	-40°F (-400°C)
Dry heat	+185°F (+85°C)
Thermal shock	-22°F to 185°F (-30°C to +85°C); cycled

STANDARD VERSION
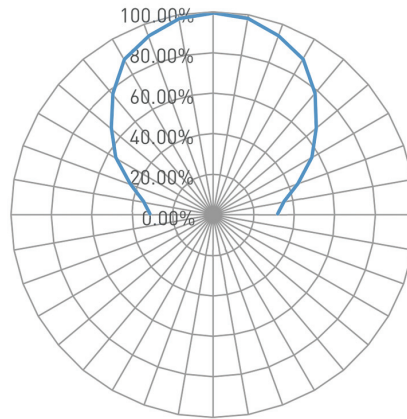
Application temperature	
Cold	-40°F (-40°C)
Dry heat (Long term, hours/days)	+302°F (+150°C)
Dry heat (Short term, minutes)	+428°F (+220°C)

HIGH TEMPERATURE VERSION

Application temperature*	
Cold	-40°F (-40°C)
Dry heat (Long term, hours/days)	+428°F (+220°C)
Dry heat (Short term, hours)	+482°F (+250°C) 6 hours
Peak temperature	+716°F (+380°C) less than 10 seconds

*The tag performance in high temperature application depends on tag mounting method and environmental conditions.

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Radiation Pattern

On metal

Order information

X4102-US000-H3	Dot On US Standard Version
X4102-EU000-H3	Dot On EU Standard Version
X4102-US050-H3	Dot On US High Temperature Version
X4102-EU050-H3	Dot On EU High Temperature Version

Dot XS

AUTOCLAVABLE

For more information on Dot XS autoclavable version, please download here or contact us at sales@xerafy.com