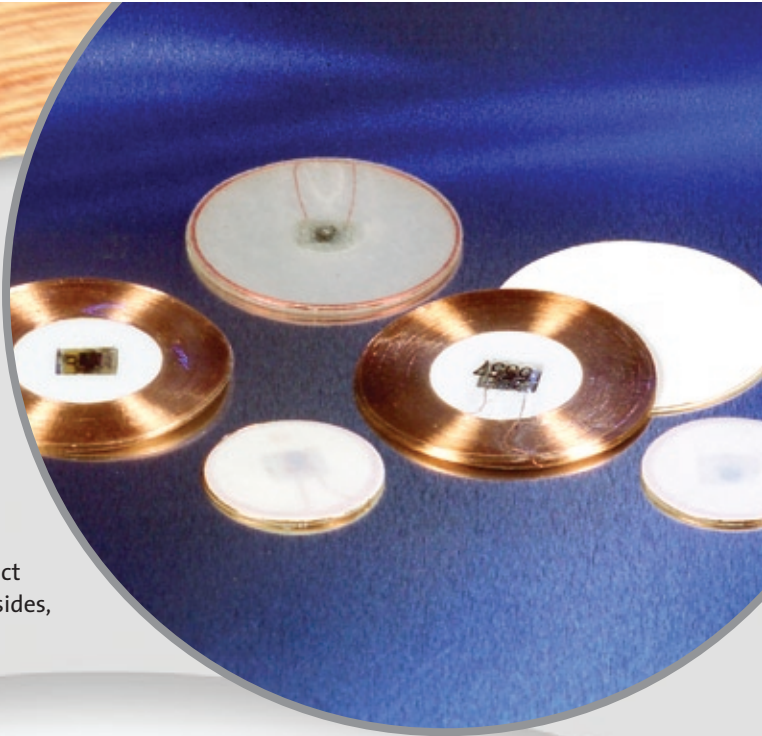


# Product Information

**SES RFID Solutions**

## E-unit

RFID chip and coil antenna for embedding into your product  
EU = bare module coil, EUP = with paper backing on both sides,  
SGSD = with spacer and paper backing on both sides



### MECHANICAL DIMENSIONS

	SGSD	EU*
<b>Diameter</b>	▶ 15 ~ 30 mm ± 0.5 mm	▶ 10 ~ 30 mm ± 0.5 mm
<b>Thickness</b>	▶ 0.85 mm ± 0.05 mm (125 kHz) ▶ 0.75 mm ± 0.05 mm (13.56 kHz)	▶ 1.2 mm ~ 4 mm ± 0.3 mm (125 kHz)

### CHIP TYPE

- ▶ EM series, Atmel series, NXP series, Infineon series

### ELECTRICAL

- LF operating frequency** ▶ 125 kHz\*\* ± 6 kHz
- HF operating frequency** ▶ 13.56 MHz Reader Standard (ISO/IEC 15693, ISO/IEC 14443)

### TEMPERATURE

	SGSD	EU*
<b>Storage</b>	▶ -25°C to +75°C	▶ -25°C to +75°C
<b>Operating</b>	▶ -25°C to +65°C	▶ -25°C to +65°C

### MATERIAL

- ▶ Copper wire antenna and module

### OPTIONS

- ▶ Code printing for SGSD products

### TYPE NUMBER

- ▶ EUT-XX (E-unit, XX denotes IC)
- ▶ EUP-XX (E-unit with paper backing, XX denotes IC)
- ▶ SGD-XX (E-unit with paper backing and antenna carrier, XX denotes IC)

### SES RFID SOLUTIONS

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\*please refer to the E-unit size table  
\*\*frequency adjustment 100 kHz ~ 150 kHz  
Note: E-units should not be assembled in products  
that are sealed using ultrasonic welding.  
SGSD (= with spacer and paper backing on both sides)  
is a SES patented product.

Specification is subject to change without notice. Version 2009