Data Sheet / Datenblatt

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File ARS4-B.Datasheet v4 (Entry).docx

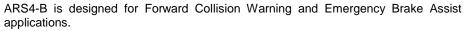
ARS4-BAdvanced Radar Sensor



Advanced Driver Assistant Systems

General Description / Allgemeine Beschreibung:

ARS400-Entry is a 77 GHz radar sensor with digital beam-forming scanning antenna which offers two scans for far and short range. The ARS400-Entry uses a pulse compression radar modulation scheme as basic principle for its measurements.





Technical Data / Technische Daten:

Signal / Signal	Value / Wert	Unit / Einheit	Remark / Bemerkung
Radar Characteristics	·		
Operation frequency	76-77	GHz	
Distance measurement (for a target with RCS=10dBsm, typ. values)	0.5 – 120 0.5 - 55	m m	one far range scan of \pm 9° (170m typ, 150m min @ 0°) one near range scan of \pm 45°
Accuracy for distance measurement	± 0.13	m	For point target
Speed measurement	-400 + 200	kph	
Accuracy of speed measurement	0.1	Kph	For point target
Emitted radar power (EIRP)	< 36	dBm	4W (peak)
Conducted power (antenna input)	< 10	dBm	10mW
Update rate	60	ms	
Antenna			
Antenna principle	Planar antenna combined with digital beam forming		6 channels
Field of view in azimuth	-9+9 -45+45	0	Far range scan Near range scan
Field of view in elevation	18	o	6 dB – two way
Angle measurement accuracy	± 0.2 ± 2	0	± 9° ± 9 ± 45°
Vehicle Interface			
Vehicle interface	CAN		A host wake-up or unwakeble CAN transceiver module
Power consumption	4W	W	Power supply of 12 V on KL.15 (ignition)
Mechanical size	90 x 62 x 20	mm	Width x length x height
Weight	< 200	g	
Mounting area	Application specific		Vertically: between 295mm and 800 mm above road- surface level
Connector	Hirschmann 872-665-011		6 pins standard male connector
Vehicle integration	 Concealed in front of grill or behind bumper fascia. No manual alignment necessary 		
Temperature range	-40 +85 -40 +105	° C	Operating Storage