

PN: 99-0554



Description

3 axis angle measurement using MEM's accelerometer and gyroscope technology provides rock solid stability and accuracy.

Features

- Precise angle measurement even on high vibration and shock equipment
- MEMs sensor redundancy for exceptional reliability
- Configurable calculation options allow optimization to specific applications
- Configurable zero point offset
- Automatically detects bus speed from 125 kbd to 1 Mbd
- Automatically detects the mounting configuration
- Shock resistance up to 50 g
- Operating temperature range of -40°C to 85°C
- Supply voltage range of 8V to 45V
- 0.002° resolution
- Reverse battery protection
- 3- point mounting to prevent assembly mounting errors
- IP67 rating
- 48V jump start and load dump compliant
- RoHS / REACH / Conflict Free compliant
- Power and communication LEDs

Specifications

General Parameters	99-0670, 99-0554	99-0680, 99-0554
Measurement Angle	± 180°	± 64.5°, -64°
Resolution	0.002°	0.007°
Accuracy (Typical)	± 0.3°	± 0.3°
Communication Interface	SAE J1939	SAE J1939

Electrical Parameters	Min	Typ	Max	Units
Supply Voltage	8	14	45	VDC
Reverse Battery Voltage	-	-	-45	VDC
Current Consumption	8.5	-	16.5	mA
Electrostatic Discharge (ESD)	-15	-	15	KV

Mechanical Parameters	
Storage Temperature	-40°C to 85°C
Operating Temperature	-40°C to 85°C
Mechanical Shock - Operational	50g
Ingress Protection	IP67
Mating Connector	Deutsch DT04-6S

Test Parameters

Thermal Cycle Test	SAE J1455 - Section 4.1.3 8-Hour Cycle
Thermal Shock Test	ISO16750-4 Section 5.1,5.2
Drop/Test Handling Shock	IEC 60068-2-31 Section 5.1,
Humidity & Temperature Cycling (Thermal Cyclic Aging)	SAE J1455 Section 4.2.3, Figure 4A 8-Hour Cycle
Fluid Compatibility	SAE J1455 Section 4.4
Thermal Shock Immersion	ISO16750-4 Section 5.4.3
Ingress Protection (IP)	IEC 60519, IP67
Vibration-Sinusoidal	10-22.289Hz 10mm P-P Displacement, 22.289Hz to 500Hz, 20g RMS acceleration
Vibration-Random	Trombetta profile, 11.55G RMS, 5-2000Hz
Load Dump	ISO16750-2 Section 4.6.4.2.1, SAE J1113-11, Pulse 5A, ISO7637 Pulse 5A

Product Dimensions

