

TEMPERATURE-SENSORS FOR E-MOBILITY / E-MOTOR

Tateyama offers temperature sensors for the E-Motor that combine:

- Mountability
- Reliability
- Performance



FEATURES

By using special PPS (Poly Phenylene Sulfide) material:

- Specialized design for next future e-motor shape
- High thermal resistant & insulation by PPS resin
- Great conductivity by special PPS
- Strong oil proof performance (ATF digest)
- Various line-up of case shape

SPECIFICATION

Thermal time constant	App 3 Sec (0 → 50°C, in the blended water)
Operation temperature	-40~250°C
Withstand voltage	1200 V in the air

APPLICATION

- Automotive E-Mobility E-Motor
- Temp. Range: -40°C ... +250°C

BENEFITS

- Maintain adhesive property sensor in vibration environment
- Safety motor control by high accuracy motor temperature sensing

RELIABILITY TEST LIST

High temperature ^①	180°C × 1000 h
High temperature ^②	200°C × 500 h
Low temperature	-40°C × 1000 h
Electric current & humidity	60°C - 90% RH × 3 mW × 500 h
Heat cycle test	(-40°C ↔ 150°C · each 10 min) × 1000 cycles
ATF digest test	Digesting sensing area in the 150°C ATF × 1000 h

DRAWING

