

Medical Application Solution

Accurate and stable instrumentation in the medical field requires the ability to detect very small signals, without producing false readings. VPG Ultra-high precision current sensing resistors allows high accuracy and reliability in any medical application.

Function

Fluid Injection Device



Customer requirements:

- Reliable measurements of motor control are necessary to perform injections at precise location
- High Speed response
- Low sensitivity to short-time load
- Surface Mount to reduce space
- 4 pad Kelvin Connections to improve accuracy

Suitable products

VCS1625ZP (Z-Foil)

Ultra-High precision Z-Foil SMD current sensing chip resistors

- * Load Life stability: 0.02% @ 70°C, 2k hrs rated
- * Absolute tolerance: 0.2%
- * Absolute TCR: 0.05ppm/°C max at 0°C to +60°C
- * PCR : “ ΔR due to self heating, 5ppm at rated power
- * Rise Time: 1ns, effectively no ringing
- * Short Time overload: <0.005%



VCS331Z, VCS332Z (Z-Foil)

High precision 4-terminal current sensing chip on heat sink

- * Load Life stability: 0.005, 3W on heatsink @ 25°C, 2k hrs rated
- * Resistance tolerance: $\pm 0.01\%$
- * TCR: 0.05ppm/°C max at 0°C to +60°C
- * Power Rating: 10W on heatsink @ 25°C, 3W in free air
- * Rise Time: 1ns, effectively no ringing
- * Thermal resistance: 6°C/W

