

SGC24012_IP007704_GF_22FDX

HIGH RESOLUTION 12-BIT JTM / ADC

Features

- High resolution temperature and voltage measurement
- ΔV_{be} temperature measurement
- High noise immunity ($\Delta \Sigma$ ADC)
- 0.20°C resolution

General Description

SGC24012_IP007704_GF_22FDX is an accurate high-resolution ADC for temperature or voltage monitoring. Due to its high accuracy, it has a wide range of applications from predictive protection systems to temperature compensation of crystal oscillators. Making use of a 12-bit advanced fully differential $\Delta \Sigma$ ADC, the SGC24012_IP007704_GF_22FDX offers excellent repeatability and high PSRR. Specified from $T_J = -40^\circ\text{C}$ to $+125^\circ\text{C}$, it is designed to achieve 2% overall temperature accuracy.

Applications

- General purpose ADC
- In chip temperature monitoring
- Crystal oscillator temperature curve compensation

Quick Reference

SYMBOL	DESCRIPTION	MIN	TYP	MAX	UNIT
V_{AVDD}	Analog Voltage	1.60	-	1.98	V
V_{DVDD}	Digital Voltage	0.70	-	0.90	V
F_{CLK}	Clock Range	0.50	1.00	1.50	MHz