

Vishay Siliconix Focus Product

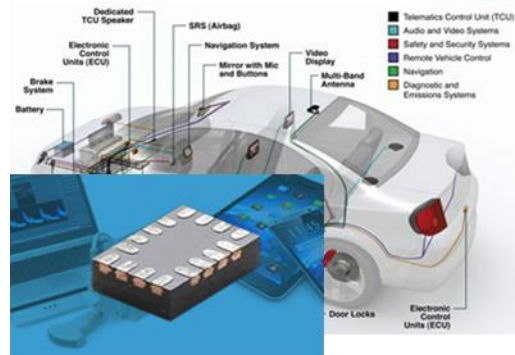
New DGQ2788A - Automotive qualified (AEC-Q100 Grade 1) Analog Switch

Vishay are pleased to announce first in the Siliconix history Automotive qualified Analog Switch! The DGQ2788A is our first Automotive qualified Dual DPDT / Quad SPDT Analog Switch with 0.37 Ω , 338 MHz Bandwidth.

The DGQ2788A, is a four-channel single-pole double-throw (SPDT) analog switch with two control inputs. It is also known as a two-channel double-pole double-throw (DPDT) configuration. The part is designed to operate from 1.8 V to 5.5 V single power rail. All switches conduct equally well in both directions, offering rail to rail signal switching and can be used both as multiplexers as well as de-multiplexers.

The DGQ2788A offers low parasitic capacitance and highly matched low and flat switch resistance over the full signal range. It features break-before-make switching and low control logic threshold. The part supports rail to rail fast edge pulsing signals and have 0.1 ns/typ. Propagation delay. It is ideal for both analog and digital signal switching in space constrain applications requiring high performance and efficient use of board space.

The DGQ2788A comes in a small miniQFN-16 lead package of 2.6 mm x 1.8 mm x 0.55 mm. This product has been qualified to the Automotive Electronics Council (AEC) standard Q100 (Grade 1) and is suitable for use in automotive applications.



Product Features

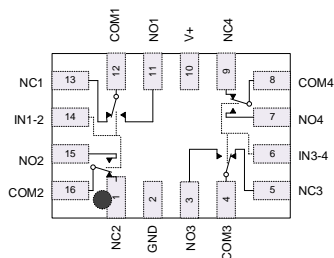
- AEC-Q100 Grade 1, -40C to +125C
- 1.8V to 5.5V single supply operation
- Low, flat, and highly match switch resistance
- RON: 0.37 Ω @ 2.7V
- Flatness: 0.01 Ω @ 2.7V
- Channel match: 0.05 Ω @ 2.7V
- 338MHz -3dB bandwidth
- Low parasitic capacitance, 20pF Con
- Power down and signal over rail protection
- Latch up current: 300mA (JESD78)
- ESD/HBM: >2KV, ESD/CDM: 1kV
- mQFN16: 1.8 x 2.6 x 0.55 mm

Key Benefits

- Wide supply voltage range
- Over voltage tolerant switch
- Suitable for audio, video, and bus switching
- Compact package

Market Applications:

- Audio, video, and bus switching
- Infotainment
- Power windows, power locks and power mirror control
- Advanced diagnostics and engine control modules
- Traction and stability control modules



TRUTH TABLE		
LOGIC	NC1, 2, 3 and 4	NO1, 2, 3 and 4
0	On	Off
1	Off	On