



Low-Voltage, 0.8- Ω r_{ON} , Dual SPST Analog Switch

FEATURES

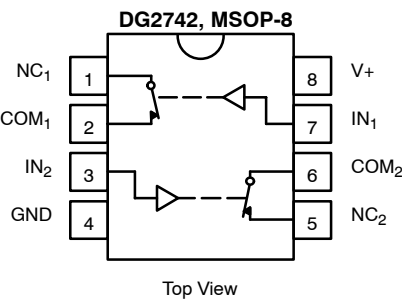
- Low Voltage Operation (1.6 V to 3.6 V)
- Low On-Resistance - $r_{DS(on)}$:
0.8 Ω @ 2.7 V
- High Current Handling Capacity:
150-mA Continuous
- Off-Isolation: -56 dB @ 1 MHz
- Fast Switching: 25 ns t_{ON}
- Low Charge Injection— Q_{INJ} : 5.8 pC
- Low Power Consumption: < 1 μ W
- ESD Protection > 2,000 V

BENEFITS

- High Accuracy
- High Bandwidth
- TTL and Low Voltage Logic Compatibility
- Low Power Consumption
- Reduced PCB Space (SOT23-8 and MSOP-8)



FUNCTIONAL BLOCK DIAGRAM AND PIN CONFIGURATION—DG2742/DG2743



**ABSOLUTE MAXIMUM RATINGS**

Reference to GND

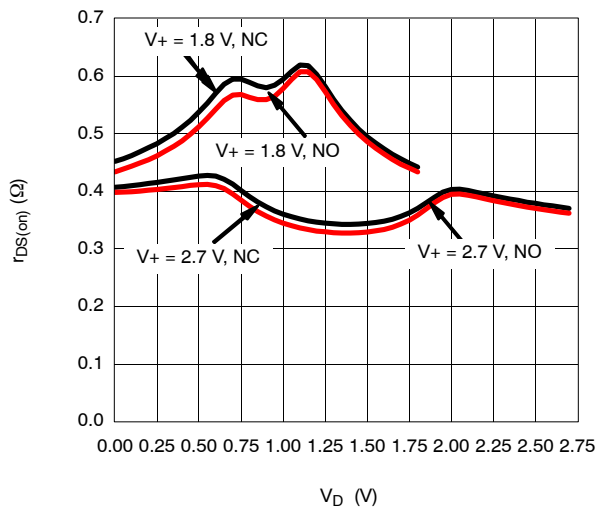
V+ -0.3 to +4 V

IN, COM, NC, NO^a -0.3 to (V+ + 0.3 V)

Continuous Current (NO, NC and COM Pins) ±200 mA

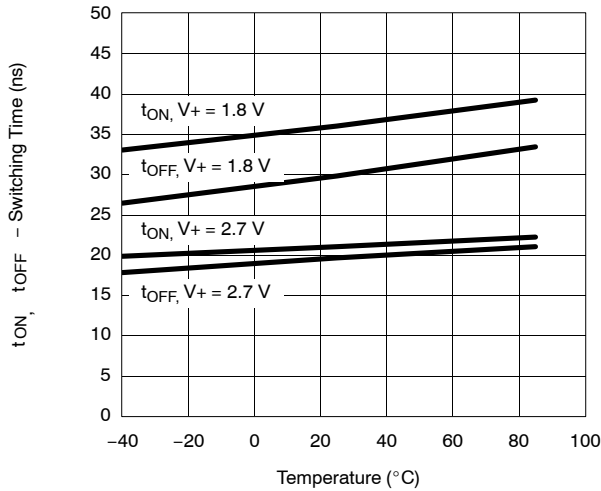
Peak Current ±300 mA
(Pulsed at 1 ms, 10% duty cycle)

SPECIFICATIONS (V ₊ = 3.0 V)							
Parameter	Symbol	Test Conditions Otherwise Unless Specified V ₊ = 3 V, ±10%, V _{IN} = 0.5 or 1.4 V ^a	Temp ^a	Limits –40 to 8			

**TYPICAL CHARACTERISTICS (25°C UNLESS NOTED)** **$r_{DS(on)}$ vs. V_{COM} vs. $1 V_{CC}$** 

TYPICAL CHARACTERISTICS (25°C UNLESS NOTED)

Switching Time vs. V_{CC} and Temperature



TEST CIRCUITS

