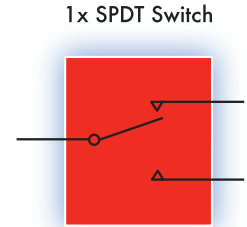




# Fairchild's 1x SPDT Audio Switches

## High-Performance Audio Features for a Variety of Needs

Fairchild's audio switches offer various levels of On Resistance (as low as 0.35 ohms), small scale packaging (as small as 1.45 mm<sup>2</sup>) and are available in the most common switch configurations. All are designed to minimize THD, leakage current and crosstalk while maximizing ESD and Off Isolation.

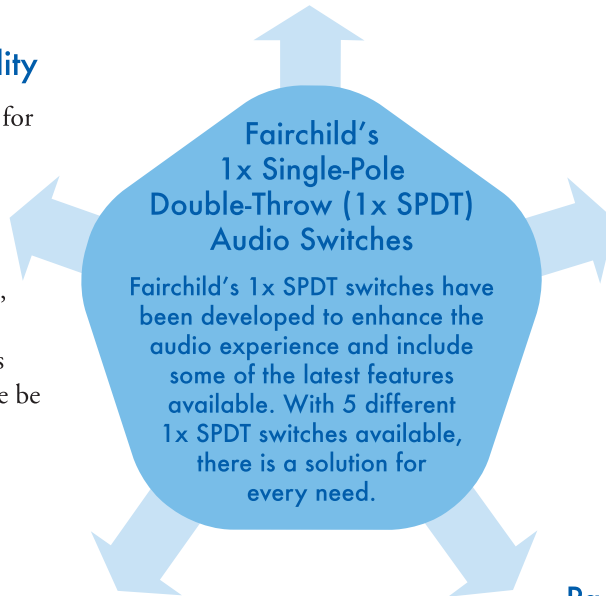


### THD and R<sub>ON</sub> Flatness

THD is the measurement of the amount of distortion created by the switch. R<sub>ON</sub> Flatness allows for a low total harmonic distortion.

### Negative Swing Capability

Negative swing capability allows for direct connection of an 0V bias audio amplifier to speakers, eliminating the need for AC-coupling capacitors. In addition to improving audio performance, this feature also saves money on AC-coupling capacitors and frees board space that would otherwise be utilized by these capacitors.



### Low R<sub>ON</sub>

Fairchild's SPDT audio switches all provide a low R<sub>ON</sub> feature, with some as low as 0.35 ohms. Lower R<sub>ON</sub> performance reduces signal loss, resulting in a more efficient signal transfer across the switch.

### Low I<sub>CCT</sub>

Low I<sub>CCT</sub> is a term used by Fairchild to identify the additional I<sub>CC</sub> current when a logic control signal is not at V<sub>CC</sub> or ground. Fairchild's unique circuitry provides the lowest power consumption under these conditions.

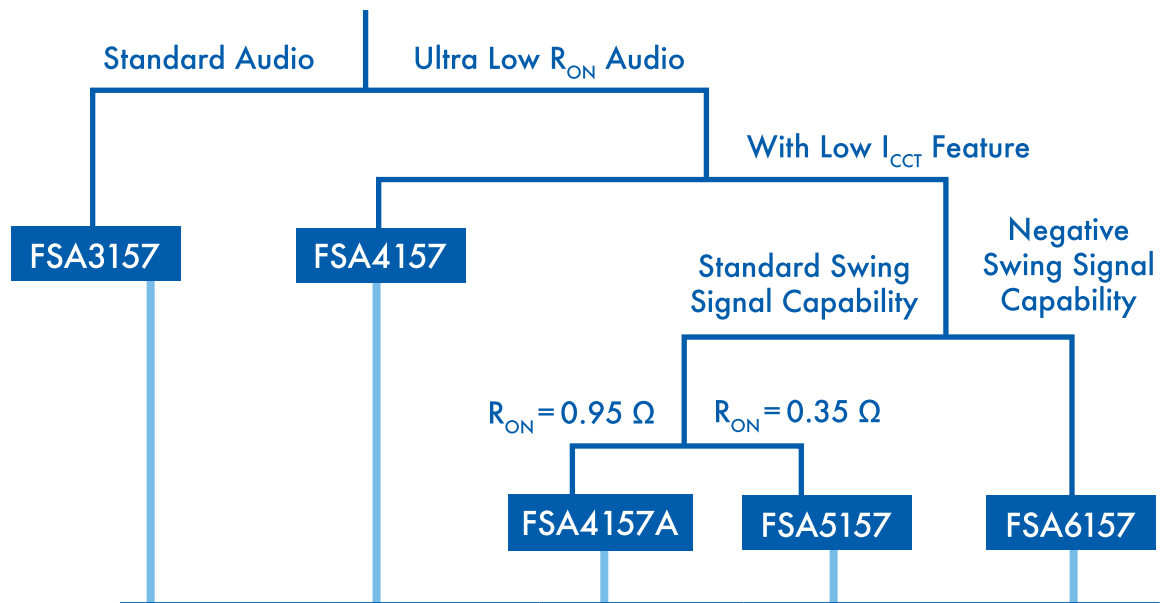
### Packaging Choices

Fairchild's audio switches are available in a variety of package options. With several 6 lead configurations, there are solutions to accommodate for a variety of designs and applications.

# Which Fairchild 1x SPDT Audio Switch is best for your needs?



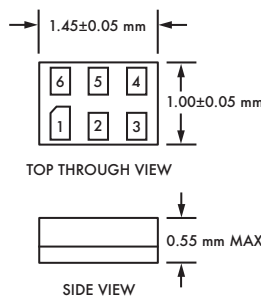
## 1x SPDT Audio Switches



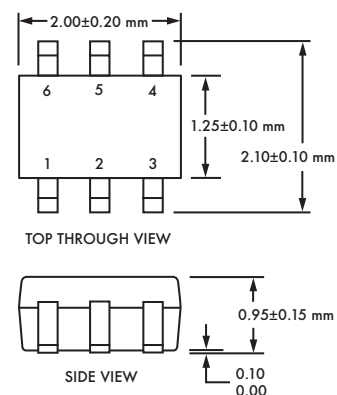
	FSA3157	FSA4157	FSA4157A	FSA5157	FSA6157
$R_{ON}$ (ohms)	3.0	0.95	0.95	0.35	0.40
Supply (V)	1.65 V to 5.5 V	1.65 V to 5.5 V	1.65 V to 5.5 V	2.7 V to 5.5 V	1.65 V to 4.3 V
Bandwidth (MHz)	250	300	300	80	50
ESD (kV)	4	7.5	7.5	8	13.5 (I/O to GND) 16.0 (Power to GND)
Low $I_{CCT}$			√	√	√
Negative Swing Capability					√
Packaging	MicroPak™ 6 6-Lead SC70	MicroPak™ 6 6-Lead SC70 6-Lead SC88	MicroPak™ 6 6-Lead SC70	MicroPak™ 6 6-Lead SC70	MicroPak™ 6

## Packaging Information

### MicroPak™ 6



### 6-Lead SC70



Additional information available at:  
[www.fairchildsemi.com/analogswitch](http://www.fairchildsemi.com/analogswitch)