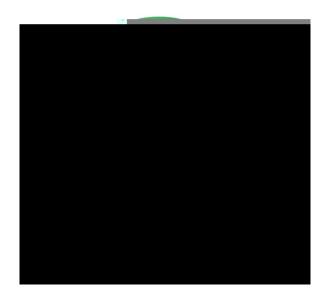


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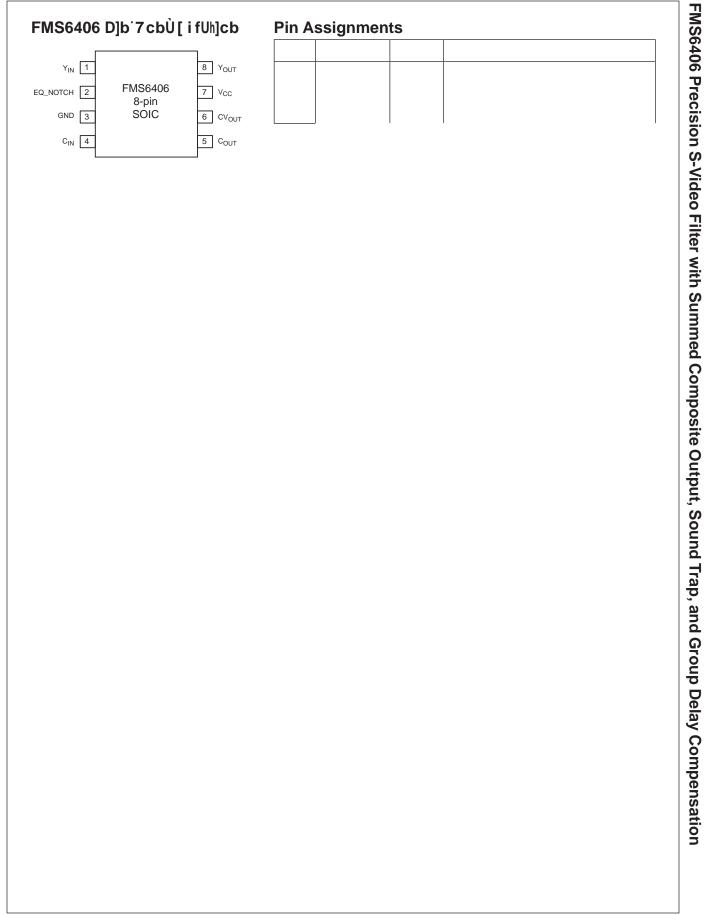
Please note: As part of the Fairchild Semiconductor integration, some of the Fairchild orderable part numbers will need to change in order to meet ON Semiconductor's system requirements. Since the ON Semiconductor product management systems do not have the ability to manage part nomenclature that utilizes an underscore (_), the underscore (_) in the Fairchild part numbers will be changed to a dash (-). This document may contain device numbers with an underscore (_). Please check the ON Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at <u>www.onsemi.com</u>. Please email any questions regarding the system integration to <u>Fairchild questions@onsemi.com</u>.

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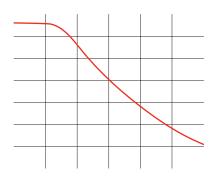
FMS6406 Precision S-Video Filter with Summed Composite Output, Sound Trap, and Group Delay Compensation

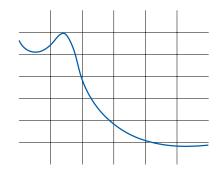
Electrical Characteristics

 $T_c = 25^{\circ}C$, $V_i = 1V_{pp}$, $V_{CC} = 5V$, all inputs AC-coupled with 0.1µF, all outputs are AC-coupled with 220µF into 150 , referenced to 400kHz; unless otherwise noted.

Typical Performance Characteristics

 $T_c = 25^{\circ}C$, $V_i = 1V_{pp}$, $V_{CC} = 5V$, all inputs AC-coupled with 0.1µF, all outputs are AC-coupled with 220µF into 150 , referenced to 400kHz; unless otherwise noted.





10 5 -5 -10 -15 -20 -25 -30 -35 -40 -45 -55 1500 1000 500 0 0-2000-1000 Gain (dB) -1500 -2000 1 = 4.425MHz (198.47ns) -2500 5 15 25 30 25 30 400kHz 10 20 400kHz 5 10 15 20 Frequency (MHz) Frequency (MHz)

Typical Performance Characteristics

 $T_c = 25^{\circ}C$, $V_i = 1V_{pp}$, $V_{CC} = 5V$, HD/N_SD = 0, $R_{SOURCE} = 37.5$, all inputs AC-coupled with 0.1μ F, all outputs are AC-coupled with 220μ F into 150, referenced to 400kHz; unless otherwise noted.

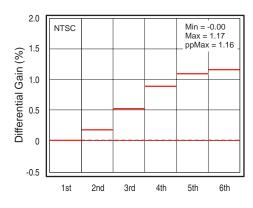


Figure 13. Differential Gain, VOUT

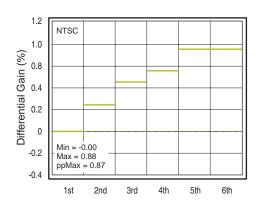


Figure 15. Differential Gain, COUT

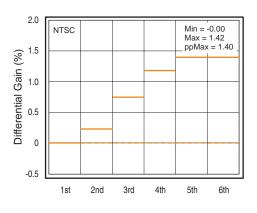


Figure 17. Differential Gain, CVOUT

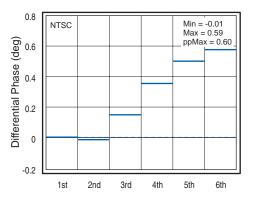


Figure 14. Differential Phase, VOUT

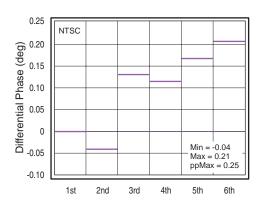


Figure 16. Differential Phase, COUT

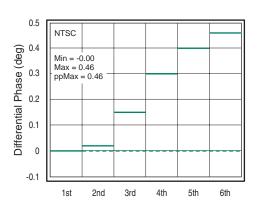
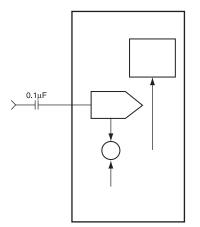


Figure 18. Differential Phase, CVOUT

Typical Application Diagrams



220µF ||

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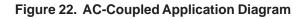
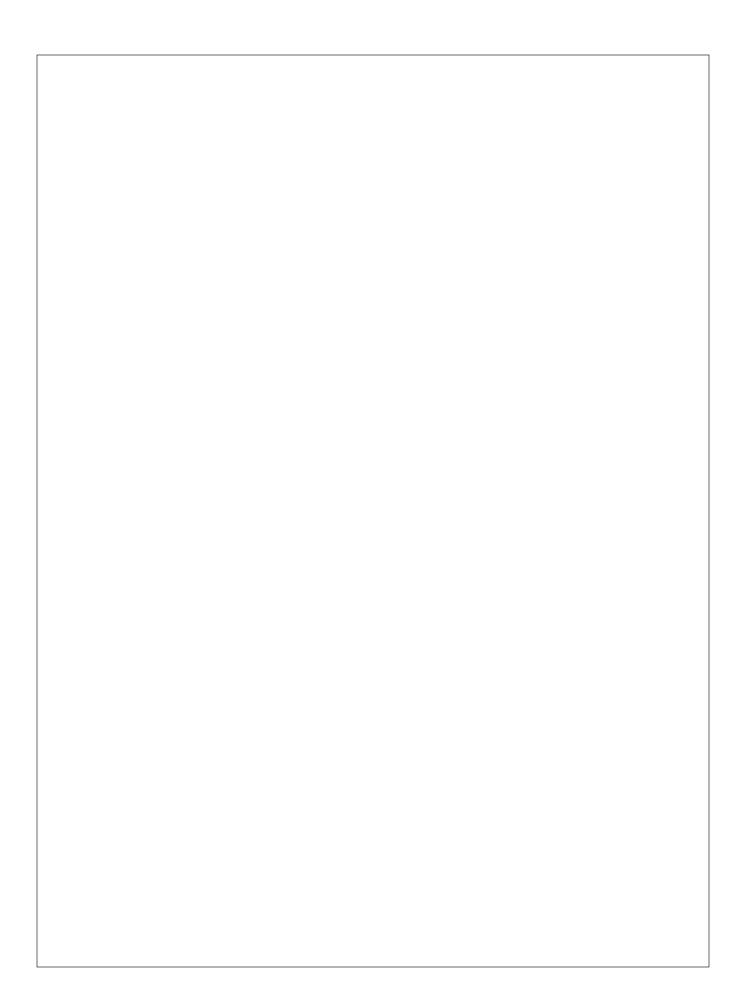
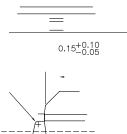


Figure 23. DC-Coupled Application Diagram





8-Lead Outline Package (SOIC)



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