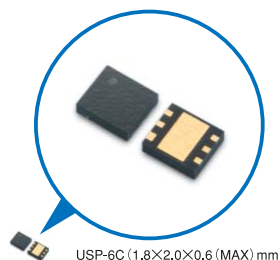


High Speed Transient Response - Dual LDO Regulators

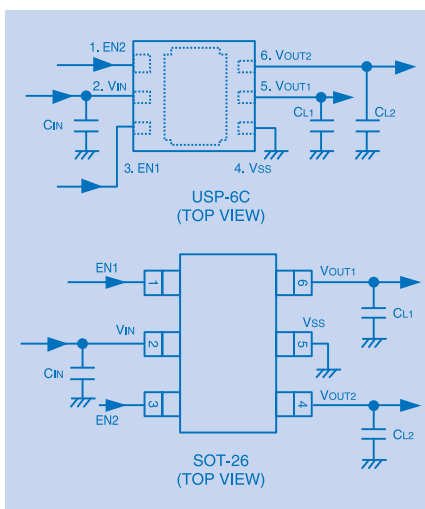
XC6415 Series

XC6415 series are highly accurate, Dual, low noise, CMOS LDO voltage regulators. Performance features of the series include low output noise, high ripple rejection rate, and low dropout. Extremely dense power supply circuit can be organized with a 2 channeled high speed, low ON resistance LDO voltage regulator which is built-in to an ultra small USP-6C package. The output voltage for each regulator is set independently by laser trimming and selectable in 50mV increments within a range of 0.8 to 5.0V. The EN function allows the output of each regulator to be turned off independently. In this state, the IC turns on the internal switch located between the VOUT and the VSS pins. This function enables the electric charge at the output capacitor (CL) to be discharged via the internal auto-discharge resistance, and as a result the VOUT pin quickly returns to the VSS level. The output stabilization capacitor (CL) is compatible with low ESR ceramic capacitors. The high level of output stability is maintained even during frequent load fluctuations, due to the excellent transient response performance. Because regulator 1 and 2 are completely isolated, a cross talk between each channel, which causes a problem during load fluctuations, can be greatly reduced.



USP-6C (1.8X2.0X0.6 (MAX) mm)

| | |
|-------------------------------|--------------------------------------|
| Output Current | : 200mA (300mA Limit: TYP.) |
| Dropout Voltage | : 90mV@IOUT=100mA (VOUT=3.0V) |
| Operating Voltage Range | : 1.5V ~ 6.0V |
| Output Voltage Range | : 0.8 ~ 5.0V (50mV increments) |
| Low Power Consumption | : 28μA/ch (TYP.) |
| Stand-by Current | : Less than 0.1μA |
| Operating Ambient Temperature | : -40°C ~ 85°C |
| Low ESR Capacitor | : 1.0μF ceramic capacitor compatible |
| Packages | : USP-6C, SOT-26 |



TOIREX

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