

XD6216 28V LDO with Low Quiescent Current

**AEC-Q100
Grade 2**

Designed to operate with input voltages as high as 28V, the XD6216 range are ideally suited to applications where nominal 12V supplies are commonly encountered. In addition, the new regulators consume only 5μA in normal operation, falling to 0.1μA in standby mode, making them an attractive option wherever efficiency and power saving are key requirements.

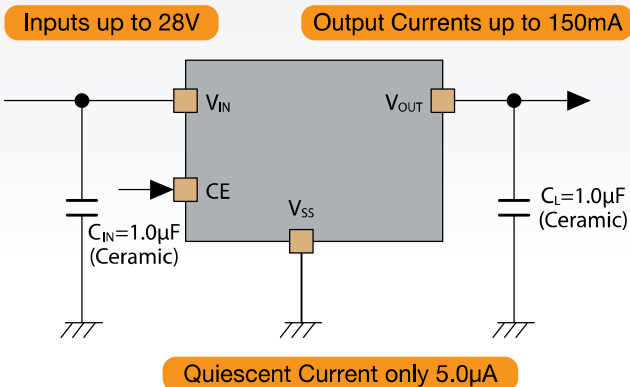
XD6216 can be supplied with a factory set output voltage anywhere from 2.0V to 12V in 100mV increments. It is suitable for use with low ESR ceramic capacitors, thereby eliminating the potential reliability problems associated with electrolytic and tantalum components.

As a further aid to reliability an over-current protection circuit and overheat protection circuit are built-in, and when the output current reaches the current limit or the junction temperature reaches the temperature limit, the corresponding circuit activates.

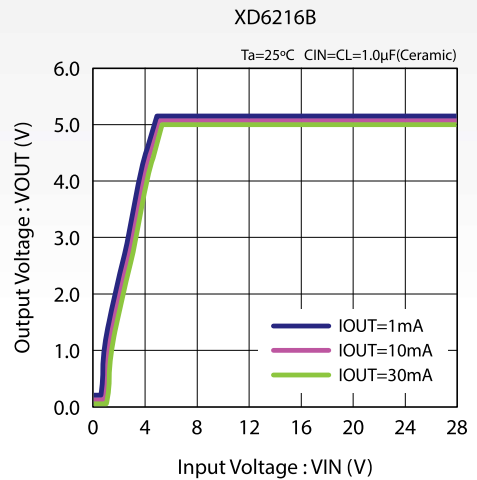
FEATURES

Output Current	150mA
Dropout Voltage	300mV @ IOU=20mA
Operating Voltage Range	2.0V ~ 28V
Output Voltages	2.0V ~ 12V (fixed output)
Output Accuracy	±2% (±1% also available)
Low Power Consumption	5μA
Stand-by Current	0.1μA
Ripple Rejection	30dB
Protection Circuits	Over Current
	Thermal Shutdown
Op. Ambient Temperature	-40°C ~ +105°C
AEC-Q100	Grade 2
Low ESR Ceramic capacitor compatible	
Packages: SOT-89-5, SOT-25	

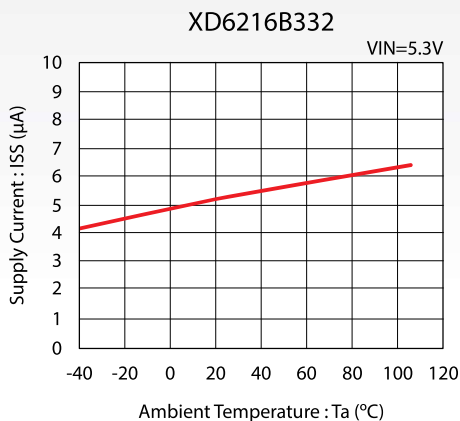
TYPICAL APPLICATION CIRCUIT



OUTPUT VOLTAGE VS. INPUT VOLTAGE



QUIESCENT CURRENT VS. TEMPERATURE



LOAD TRANSIENT RESPONSE

