## 300mA High PSRR, Low Noise, LDO Regulators

#### **Features**

- Low, 90µA No-Load Supply Current
- Guaranteed 300mA Output Current
- Dropout Voltage is 200mV @ 150mA Load
- PSRR=70dB
- Over-Temperature Protection and Short-Circuit Protection
- Fixed Mode: 1.20V~5.00V (G916-XXX)
- Adjustable Mode: from 1.25V to 5.50V (G916)
- Max. Supply Current in Shutdown Mode < 1µA
- Low Output Noise at 28µV<sub>RMS</sub> with bypass Capacitor
- Stable with low cost ceramic capacitors

#### **Applications**

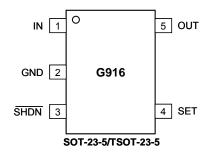
- Notebook Computers
- Cellular Phones
- PDAs
- Digital still Camera and Video Recorders
- Hand-Held Devices
- Audio Codec

#### **General Description**

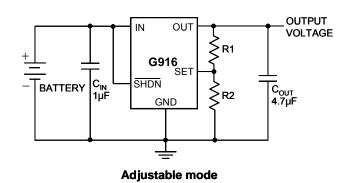
The G916 series is a low supply current, high PSRR, low noise, and low dropout linear regulator that comes in a space saving TSOT-23-5, SOT-23-5 & SC-70-5(SOT-353) package. The supply current at no-load is  $90\mu A$ . In the shutdown mode, the maximum supply current is less than  $1\mu A$ . Operating voltage range is from 2.5V to 6.0V. The over-current protection limit is set at 550mA typical. An over- temperature protection circuit is built-in in the Device to prevent thermal overload. These power saving features make the G916 series ideal for use in the battery-powered applications such as notebook computers, cellular phones, and PDA's.

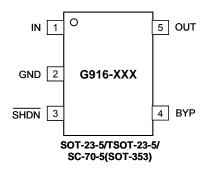
The G916 has two modes of operation. When the SET pin is connected to ground, its output is a pre-set value: 3.3V. There is no external component needed. When an output other than the preset value is needed, two external resistors should be used as a voltage divider. The output voltage is then adjusted by the resistor ratio. G916-XXX is with fixed-mode output. The output voltage range is from 1.2V to 5.0V.

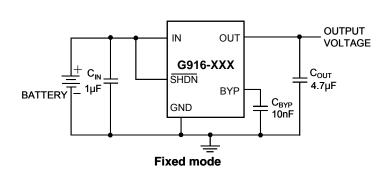
#### **Pin Configuration**



#### **Typical Application Circuit**











# Global Mixed-mode Technology Inc.

### Ordering Information

ORDER NUMBER (Pb free/Green)	MARKING	VOLTAGE	TEMP. RANGE	PACKAGE
G916-250TOUf	96ANx	2.50V	-40°C~ +85°C	TSOT-23-5
G916-270TOUf	96APx	2.70V	-40°C~ +85°C	TSOT-23-5
G916-300TOUf	96ATx	3.00V	-40°C~ +85°C	TSOT-23-5
G916T1Uf	16xx	Adjustable	-40°C~ +85°C	SOT-23-5
G916-120T1Uf	96AAx	1.20V	-40°C~ +85°C	SOT-23-5
G916-180T1Uf	96AGx	1.80V	-40°C~ +85°C	SOT-23-5
G916-330T1Uf	6Axx	3.30V	-40°C~ +85°C	SOT-23-5
G916-475T1Uf	96BMx	4.75V	-40°C~ +85°C	SOT-23-5
G916-500T1Uf	96BPx	5.0V	-40°C~ +85°C	SOT-23-5
G916-250TA1U	96Nx	2.50V	-40°C~ +85°C	SC-70-5(SOT-353)

For other output voltage, please contact us at sales@gmt.com.tw Note: TO: TSOT-23-5 T1: SOT-23-5 TA: SC-70-5(SOT-353)

1: Bonding Code "For SC-70-5(SOT-353) only"

U: Tape & Reel