

**27W SWITCHING REGULATOR  
FOR AUTOMOTIVE APPLICATION**

Type	V <sub>i</sub>	V <sub>o</sub>	I <sub>o</sub>
GS-R218	10,5 to 16,0 V	18 V	1,5 A

**DESCRIPTION**

The GS-R218 is a switching voltage regulator that can deliver an output current of 1,5 A at 18 V when supplied by a car battery.

The regulator uses a cigar lighter case with a coiled cord and it is protected against overloads and short circuits at the output (latching overload protection: to restart the regulator after the intervention of the overload protection, the input voltage must be switched OFF and ON again).


**ELECTRICAL CHARACTERISTICS** (T<sub>amb</sub> = 25°C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
V <sub>i</sub>	Input Voltage	V <sub>o</sub> = 18 V I <sub>o</sub> = 0 to 1.5 A	10.5		16	V
I <sub>iq</sub>	Input Quiescent Current	V <sub>i</sub> = 13 V I <sub>o</sub> = 0 A		17		mA
V <sub>o</sub>	Output Voltage	V <sub>i</sub> = 10.5 to 16 V I <sub>o</sub> = 0 to 1.5A	16.6	18	18.7	V
I <sub>o</sub>	Output Current	V <sub>i</sub> = 10.5 to 16V	0.0		1.5	A
I <sub>ol</sub>	Output Overload Current	V <sub>i</sub> = 10.5 to 16 V	1.6			A
V <sub>or</sub>	Output Ripple Voltage	V <sub>i</sub> = 13 V I <sub>o</sub> = 1.5A		200		mVpp
η	Efficiency	V <sub>i</sub> = 13 V I <sub>o</sub> = 1.5A		90		%
f <sub>s</sub>	Switching Frequency			300		kHz
T <sub>op</sub>	Operating Ambient Temperature Range		-20		+60	°C
T <sub>stg</sub>	Storage Temperature Range		-20		+85	°C



Information furnished is believed to be accurate and reliable. However, SGS-THOMSON Microelectronics assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of SGS-THOMSON Microelectronics. Specification mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information previously supplied. SGS-THOMSON Microelectronics products are not authorized for use as critical components in life support devices or systems without express written approval of SGS-THOMSON Microelectronics.

© 1994 SGS-THOMSON Microelectronics – All Rights Reserved

SGS-THOMSON Microelectronics GROUP OF COMPANIES

Australia - Brazil - China - France - Germany - Hong Kong - Italy - Japan - Korea - Malaysia - Malta - Morocco - The Netherlands - Singapore - Spain - Sweden - Switzerland - Taiwan - Thailand - United Kingdom - U.S.A.